DOCUMENT RESUME

ED 420 501 SE 061 500

AUTHOR	Burrelli, Joan
TITLE	Graduate Students and Postdoctorates in Science and Engineering: Fall 1996. Detailed Statistical Tables.
INSTITUTION	National Science Foundation, Washington, DC. Div. of Science Resources Studies.
REPORT NO	NSF-98-307
PUB DATE	1998-04-00
NOTE	162p.; For the 1995 report, see ED 412 779.
AVAILABLE FROM	National Science Foundation, Div. of Science Resources Studies, 4201 Wilson Blvd. Suite 965, Arlington, VA 22230.
PUB TYPE	Numerical/Quantitative Data (110)
EDRS PRICE	MF01/PC07 Plus Postage.
DESCRIPTORS	Career Choice; College Students; *Engineering Education; *Graduate Study; Higher Education; *Postdoctoral Education; *Science Education; Science Education History; Scientists; *Statistical Data; Statistics
IDENTIFIERS	National Science Foundation

ABSTRACT

Data presented in the tables of this document are derived from the National Science Foundation (NSF) and National Institutes of Health (NIH) Survey of Graduate Students and Postdoctorates in Science and Engineering taken in the fall of 1996. All eligible institutions are included in the survey for the years 1988-96. From 1984-87, the survey design was a stratified random sample with all doctorate-granting institutions, all master's-granting historically black colleges and universities, and all land grant institutions included in the certainty stratum. The remaining master's granting institutions are divided into two sample strata on the basis of enrollment size. (DDR)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 420 501

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)
This document has been reproduced as
received from the person or organization
originating it.
☐ Minor changes have been made to
improve reproduction quality.
• Points of view or opinions stated in this
document do not necessarily represent
official OERI position or policy.

Graduate Students and Postdoctorates in Science and Engineering

Fall 1996

Detailed Statistical Tables

Division of Science Resources Studies
Directorate for Social, Behavioral and Economic Sciences

National Science Foundation

NSF 98-307

Graduate Students and Postdoctorates in Science and Engineering

Fall 1996

Detailed Statistical Tables

Joan Burrelli, Project Officer

Division of Science Resources Studies
Directorate for Social, Behavioral and Economic Sciences

National Science Foundation

NSF 98-307

National Science Foundation
Neal F. Lane
Director

Directorate for Social, Behavioral, and Economic Sciences
Bennett I. Bertenthal
Director

Division of Science Resources Studies
Jeanne E. Griffith
Director

Human Resources Statistics Program
Mary J. Golladay
Program Director

Division of Science Resources Studies

The Division of Science Resources Studies (SRS) fulfills the legislative mandate of the National Science Foundation Act to ...

> *provide a central clearinghouse for the collection, interpretation, and analysis of data on the availability of, and the current and projected need for, scientific and technical resources in the United States, and to provide a source of information for policy formulation by other agencies of the Federal Government...*

To carry out this mandate, SRS designs, supports, and directs periodic surveys as well as a variety of other data collections and research projects. These surveys yield the materials for SRS staff to compile, analyze, and disseminate quantitative information about domestic and international resources devoted to science, engineering, and technology.

If you have any comments or suggestions about this or any other SRS product or report, we would like to hear from you. Please direct your comments to:

National Science Foundation
Division of Science Resources Studies
4201 Wilson Blvd., Suite 965
Arlington, VA 22230
Telephone: (703) 306-1780
Fax: (703) 306-0510
email: srsweb@nsf.gov

Suggested Citation

National Science Foundation, Division of Science Resources Studies, *Graduate Students and Postdoctorates in Science and Engineering: Fall 1996*. NSF 98-307, Project Officer, Joan Burrelli (Arlington, VA 1998).

April 1998

SRS data are available through the World Wide Web (http://www.nsf.gov/sbe/srs/stats.htm). For more information about obtaining reports, contact pubs@nsf.gov or call (301) 947-2722. For NSF's Telephonic Device for the Deaf, dial (703) 306-0090.

Contents

Section	*Page*
General Notes	1
Technical Notes	3
Technical Tables	9
Detailed Statistical Tables	27
Survey Materials	138
List of Doctorate-Granting and Master's-Granting Institutions	147
Getting Information on the World Wide Web	
Order Form	

General Notes

Data presented in these tables are derived from the National Science Foundation/National Institutes of Health (NSF/NIH) Survey of Graduate Students and Postdoctorates in Science and Engineering (graduate student survey), Fall 1996. Unless otherwise specified, the published data represent estimates of total enrollment in science and engineering (S&E) programs in approximately 11,592 graduate departments at 603 institutions in the United States and outlying areas.

All eligible institutions were included in the survey in the years 1988-96. From 1984-87 the survey design was a stratified random sample, with all doctorate-granting institutions, all master's-granting historically black colleges and universities, and all land-grant institutions included in the certainty stratum. The remaining master's-granting institutions were divided into two sample strata on the basis of enrollment size. Data for sampled institutions for the years 1984-87 were reestimated in 1988 on the basis of 1983 and 1988 data. During the 1989 survey cycle, S&E field definitions were reviewed and some departments were deleted. Data for 1975-88 were adjusted to conform to the revised definitions.

In 1992, the citizenship categories requested were modified to conform to those used in other surveys conducted by NSF, the Department of Education's National Center for Education Statistics (NCES), and others. Prior to that time, permanent residents (those who held green cards but had not yet been granted U.S. citizenship) were to be included in "Foreign"; in subsequent years these individuals were included in the "U.S. citizens" total and reported according to racial/ethnic background.

For these reasons, and because institutions may revise their data for earlier years, only the latest trend data should be used in historical analyses.

For further information on the survey, please contact the Project Officer—

Joan Burrelli, Project Officer
Science and Engineering Education
and Human Resources Program
National Science Foundation
4201 Wilson Boulevard, Suite 965
Arlington, VA 22230

Telephone: (703) 306-1774, ext. 6942
Internet: jburrell@nsf.gov

TECHNICAL NOTES

THE SURVEY UNIVERSE

The data collected in the fall 1996 Survey of Graduate Students and Postdoctorates in Science and Engineering represent national estimates of graduate enrollment and postdoctoral employment at the beginning of academic year 1996–97 in all academic institutions in the United States that granted doctorate or master's degrees in any science or engineering field. Included are data for all branch campuses, affiliated research centers, and separately organized components such as medical or dental schools, schools of nursing, public health, etc. The survey universe consisted of 722 reporting units at 603 graduate institutions. Included were 255 master's-granting institutions and 467 reporting units associated with 348 doctorate-granting institutions.

The National Science Foundation (NSF) has collected data on graduate science and engineering (S&E) enrollment and postdoctoral appointees since 1966. From fall 1966 through fall 1971, data from a limited number of doctorate-granting institutions were collected through the NSF's Graduate Traineeship Program, which requested data only on those S&E fields supported by NSF. Beginning with the fall 1972 survey, this data collection effort was assigned to the Universities and Nonprofit Institutions Studies Group and was gradually expanded during the period 1972–75 to include additional S&E fields as well as all institutions known to have programs leading to the master's or doctorate degree. Because of this expansion, data for 1974 and earlier years are not strictly comparable with 1975 and later data. Technical Table 1 shows the number of institutions, reporting units, and departments at each level included in the data, as well as the total enrollment reported for each year between 1966 and 1996. No attempt has been made to inflate the data for 1966–74 to reflect universe totals.

Beginning with the 1984–85 academic year, master's-granting institutions were surveyed on a sample basis. The fall 1988 survey included the entire survey population for the first time since 1983–84. For each year since 1988, any institutions that begin S&E master's or doctoral programs are added to the survey universe and any that close all their S&E graduate programs are deleted. (See Survey Methodology, below.)

Technical Tables 2 and 3 present data on departmental coverage by S&E field for doctorate-granting and master's-granting institutions for the last 8 years surveyed.

THE SURVEY INSTRUMENTS

The Survey Questionnaire on which data were reported in fall 1996 was the first to include a request for information on students who receive the majority of their support from the National Aeronautics and Space Administration.

Each survey package also included the following items:

1. an enclosure detailing mailing package contents;
2. a flyer explaining NSF's academic S&E surveys;
3. cover letter to survey coordinators at graduate schools or at medical schools;
4. cover letter to departmental respondents;
5. a computer-generated List of Departments or Programs (NSF Form 811) specific to each institution surveyed and based on the departments known to exist in the previous survey cycle;
6. a "crosswalk" showing National Center for Education Statistics (NCES) instructional program codes corresponding to each S&E field as defined by NSF;
7. a "How To Avoid Common Survey Errors" sheet with guidelines for avoiding the most common mistakes made in the graduate student survey; and
8. a postcard acknowledging receipt of the survey and requesting the respondent to indicate changes in coordinator name, address, telephone number, or e-mail address.

SURVEY METHODOLOGY

The survey packages were mailed out by November 30, 1996. The final survey universe consisted of 722 reporting units at 603 institutions.

The acknowledgment postcard requested that institutional coordinators indicate how the data were collected, whether the data were maintained centrally or collected from individual departments, and whether they were derived from a computerized database or were hand tabulated. Of the 722 reporting units surveyed, 98 percent have provided this information over the past 8 years.

The use of a combination of sources is reported by the majority of the schools as being the most used source of data. The use of computerized systems is on a small

but gradual increase, while the number of schools reporting the use of hand tabulating is on a slow decrease. This suggests a shift in the source from which data are derived.

Institutional coordinators were asked to review the departmental listing provided on the Survey Questionnaire, to indicate any changes in their departmental structure such as departments newly formed, phased out, split, or merged, and to check off any departments that had neither graduate students nor postdoctorates and for which Survey Questionnaires would therefore not be submitted. The revised Form 811s were returned to the data processing contractor for use as a checklist in tracking departmental responses.

A Survey Questionnaire was completed for each department either centrally or at the departmental level and was returned to the data processing contractor for data entry, editing, and tabulation. Arithmetic errors, inconsistencies between items, and sharp year-to-year fluctuations were referred to the institutional coordinators for correction or clarification.

The Response Rate

Of the 723 reporting units included in the fall 1996 survey, 715, or 98.9 percent, were able to provide at least partial data, distributed as follows:

At the departmental level 11,377 departments responded, or 98.1 percent of the 11,592 departments surveyed. This includes 9,896 departments providing complete responses, or 85.2 percent of the total. A total of 216 departments, or 1.9 percent of the departmental total, required complete imputation, and 1,519 or 13.1 percent, had one or more data cells imputed. Technical Table 4 presents the department response rates for earlier years for comparison.

Missing data for partially nonrespondent departments were imputed using the departments' previous year's data, where available, or data from peer institutions in cases where data had not been reported the previous year. Data for nonrespondent departments (departments that did not provide any data) were imputed using data from the previous year, where available. The number of departments in doctorate-granting and master's-granting institutions that required total or partial imputation and the numbers and proportions of full-time and part-time graduate students and postdoctorates imputed are shown in Technical Tables 5 and 6. Imputation rates by survey data item are provided in Technical Table 7.

Changes in Data Items

Although NSF has attempted to maintain consistent trend data, some modifications in the survey questionnaire have been made to respond to changing issues over the past 20 years. As a result some data items are not available for all institutions in all years.

Major changes in the data collected are as follows:

- From 1975 through 1977, data for master's-granting institutions were collected on a short form (i.e., an abbreviated form of the survey) that did not collect data on sex or citizenship of graduate students, nor any data on postdoctoral appointees. In 1978 a similar questionnaire was sent to doctorate-granting institutions, but master's-granting institutions were not surveyed. In addition, the 1978 questionnaire did not collect data on mechanisms of support for full-time students. All mechanisms of support data for that year were combined on one line and appeared as "other types of support" in any data tables. The 1978 figures shown in the tables for master's-granting institutions represent estimates based on 1977 and 1979 data. Beginning in 1979 the long form (i.e., the full-scale survey form) was sent to both doctorate-granting and master's-granting institutions.

- Distribution by sex was originally requested only for full-time graduate students at doctorate-granting institutions. Beginning in 1976 master's-granting institutions were requested to provide data on all graduate students by sex, and in 1977 similar data were requested for all graduate students in all institutions. The short form used in the 1978 survey did not request any information on sex; figures in the tables represent estimates based on 1977 and 1979 data.

- Citizenship data were collected only for graduate students enrolled full-time in doctorate-granting institutions through 1977. No citizenship data were requested on the short form used for master's-granting institutions in 1975-77 and for doctorate-granting institutions in 1978. Data on citizenship of all full-time graduate students are available beginning in 1979 and on those enrolled part-time since 1983.

- Racial/ethnic data were first requested in 1979 and became a standard item on the questionnaire in 1980.

- "Fellowships and traineeships" were combined on one line until 1979, when separate data on the two mechanisms were first collected.

- "Other nonfaculty research staff with doctorates" were combined with postdoctoral appointees until 1979.

- Separate data on students receiving their primary support from the U.S. Department of Agriculture were first requested in 1985.

- Racial/ethnic data by sex were first requested in 1993 and became a standard item on the questionnaire in 1994.

- Separate data on students receiving their primary support from the National Aeronautics and Space Administration were first requested in 1996.

Data Revisions

During the fall 1988 survey cycle, the criteria for including departments in the survey universe were tightened, and all departments surveyed were reviewed. Those departments not primarily oriented toward granting research degrees were no longer considered to meet the definition of science and engineering. As a result of this review, it was determined that a number of departments, primarily in the field of "Social sciences, n.e.c." (not elsewhere classified), were engaged in training primarily teachers, practitioners, administrators, or managers rather than researchers; these departments were deleted from the database. This process was continued during the fall 1989–96 survey cycles and expanded to ensure trend consistency for the entire 1975–96 period. As a result, total enrollments and social science enrollments for all years were reduced. The net effect of adjustments over the years is shown in Technical Table 8.

During the same period, the survey methodology changed so that the institution's highest science and engineering degree in the current year would apply to all previous years in which that institution was surveyed. Since a number of master's-granting institutions have become doctorate-granting institutions, the combined effect has been a smaller decrease in enrollment at doctorate-granting institutions than at master's granting institutions. For the years 1975–76 and 1991–92, there was an increase in enrollment at doctorate-granting institutions after subsequent-year modifications.

The definition of "medical schools" was revised during the fall 1992 survey cycle to include only those institutional components that are members of the Association of American Medical Colleges. Tables generated after the fall 1992 survey differ from their counterparts in earlier years in that they exclude schools of nursing, public health, dentistry, veterinary medicine, and other health-related disciplines, and should not be compared with tables from earlier years.

List of Technical Tables

Table *Page*

1. The NSF data collection series: 1966–96 9

2. Number of science, engineering, and health departments in doctorate-granting institutions, by detailed field: 1989–96 11

3. Number of science, engineering, and health departments in master's-granting institutions, by detailed field: 1989–96 13

4. Original departmental response rates: 1975–96 15

5. Imputation for nonresponse in doctorate-granting institutions, by field and enrollment status: 1996 16

6. Imputation for nonresponse in master's-granting institutions, by field and enrollment status: 1996 17

7. Imputation rates for all departments at all graduate institutions: fall 1996 18

8. Comparison of graduate enrollment data as originally published and as modified through the fall 1996 graduate student survey cycle: 1975–96 20

Technical Table 1. The NSF data collection series: 1966-96

Year	Number of institutions surveyed	Number of reporting units	Number of departments			Graduate enrollment in surveyed fields		
			Total	Master's	Doctorate	Total	Full-time	Part-time
A. Graduate Traineeship Program								
1966	204	204	2,866	441	2,425	169,303	124,255	45,048
1967	209	209	3,014	434	2,580	179,622	133,972	45,650
1968	219	219	3,190	454	2,736	184,759	140,714	44,045
1969	224	224	3,354	460	2,894	196,341	147,515	48,826
1970	227	227	3,544	473	3,071	201,918	153,250	48,668
1971[1]	224	249	3,397	407	2,990	214,680	164,764	49,916
B. Survey of Graduate Students and Postdoctorates in Science and Engineering[2]								
Doctorate institutions:								
1972	260	328	4,593	780	3,813	210,895	161,329	49,566
1973	259	336	6,538	859	5,679	214,459	161,582	52,877
1974	280	370	7,485	1,398	6,087	260,312	190,665	69,647
1975	324	421	7,873	1,693	6,180	294,987	207,260	87,727
1976	333	431	7,967	1,746	6,221	299,213	211,079	88,134
1977	335	437	8,179	1,863	6,316	306,655	213,024	93,631
1978	312	421	8,139	1,748	6,391	299,316	208,717	90,599
1979	351	467	8,421	1,930	6,491	315,159	216,921	98,238
1980	350	466	8,528	1,982	6,546	324,542	223,059	101,483
1981	348	462	8,454	1,979	6,475	331,358	226,804	104,554
1982	345	460	8,311	1,966	6,345	337,531	229,713	107,818
1983	344	459	8,187	1,930	6,257	344,317	235,802	108,515
1984	333	452	8,188	1,898	6,290	346,720	236,914	109,806
1985	333	447	8,297	1,935	6,362	356,159	240,577	115,582
1986	333	449	8,370	1,947	6,423	367,046	249,288	117,758
1987	337	455	8,482	1,948	6,534	372,576	253,882	118,694
1988	349	468	8,728	2,032	6,696	378,066	259,219	118,847
1989	350	469	8,850	2,046	6,804	385,391	266,241	119,150
1990	349	468	8,990	2,088	6,902	398,848	274,821	124,027
1991	349	468	9,182	2,106	7,076	414,269	287,300	126,969
1992	349	468	9,418	2,147	7,271	433,038	301,119	131,919
1993	349	468	9,607	2,156	7,451	440,972	307,063	133,909
1994	348	467	9,818	2,213	7,605	441,435	308,779	132,656
1995	347	466	9,993	2,265	7,728	435,611	305,030	130,581
1996	348	467	10,013	2,319	7,694	430,631	303,586	127,045

See explanatory information, if any, and SOURCE at end of table.

Technical Table 1. The NSF data collection series: 1966-96

Year	Number of institutions surveyed	Number of reporting units	Number of departments			Graduate enrollment in surveyed fields		
			Total	Master's	Doctorate	Total	Full-time	Part-time
Master's institutions:								
1975[3]	262	262	1,132	1,132	N/A	33,563	12,427	21,136
1976	263	263	1,145	1,145	N/A	34,542	12,367	22,175
1977	268	268	1,215	1,215	N/A	38,761	13,752	25,009
1978[4]	288	288	1,372	1,372	N/A	40,596	14,313	26,283
1979	280	280	1,268	1,268	N/A	42,450	14,869	27,581
1980	278	278	1,273	1,273	N/A	42,569	15,389	27,180
1981	276	276	1,277	1,277	N/A	43,800	15,272	28,528
1982	266	266	1,276	1,276	N/A	44,803	15,083	29,720
1983	266	266	1,283	1,283	N/A	46,157	16,253	29,904
1984[5]	79	79	605	605	N/A	47,950	17,008	30,942
1985[5]	79	79	616	616	N/A	47,862	16,710	31,152
1986[5]	79	79	618	618	N/A	48,496	16,894	31,602
1987[5]	79	79	625	625	N/A	48,936	17,184	31,752
1988	257	257	1,291	1,291	N/A	46,547	15,975	30,572
1989	259	259	1,341	1,341	N/A	49,176	16,478	32,698
1990	261	261	1,372	1,372	N/A	53,330	18,009	35,321
1991	260	260	1,420	1,420	N/A	56,993	19,740	37,253
1992	259	259	1,461	1,461	N/A	60,594	21,490	39,104
1993	257	257	1,506	1,506	N/A	63,477	22,616	40,861
1994	257	257	1,558	1,558	N/A	63,107	23,350	39,757
1995	256	256	1,584	1,584	N/A	64,091	24,088	40,003
1996	255	255	1,579	1,579	N/A	63,895	24,782	39,113

1 The 1972 survey also collected selected data for 1971.

2 The name of the survey was changed in 1981 to specify the inclusion of engineering.

3 The 1976 survey also collected 1975 data from master's-granting institutions.

4 Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

5 Master's-granting institutions were surveyed on a sample basis from 1984 through 1987.

KEY: N/A = Not applicable

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering.

Technical Table 2. Number of science, engineering, and health departments in doctorate-granting institutions, by detailed field: 1989-96

Field	1989	1990	1991	1992	1993	1994	1995	1996
Total, all surveyed fields	8,850	8,990	9,182	9,418	9,607	9,818	9,993	10,013
Total, science and engineering fields	6,407	6,479	6,630	6,783	6,874	7,015	7,134	7,134
Sciences, total	5,108	5,249	5,363	5,481	5,550	5,655	5,748	5,714
Physical sciences, total	547	545	553	558	561	562	571	567
Astronomy	33	33	33	33	34	34	35	35
Chemistry	262	262	264	265	265	263	264	265
Physics	238	236	243	245	247	250	252	249
Physical sciences, n.e.c.	14	14	13	15	15	15	20	18
Earth, atmos., & ocean sci., total	303	308	320	322	326	335	349	346
Atmospheric sciences	28	28	29	29	31	32	33	33
Geosciences	192	193	201	202	202	206	210	210
Oceanography	42	42	45	45	45	46	50	48
Earth, atmos., & ocean sci., n.e.c.	41	45	45	46	48	51	56	55
Mathematical sciences, total	353	358	364	371	377	385	390	390
Mathematics & applied mathematics	288	291	295	296	300	305	309	308
Statistics	65	67	69	75	77	80	81	82
Computer sciences	220	231	238	249	252	259	270	277
Agricultural sciences	284	294	302	314	311	317	323	317
Biological sciences, total	1,824	1,826	1,868	1,907	1,951	1,978	1,992	1,975
Anatomy	115	107	106	105	104	104	101	100
Biochemistry	189	182	186	189	189	190	190	190
Biology	226	233	231	233	232	231	231	234
Biometry/epidemiology	49	51	56	61	69	71	72	72
Biophysics	32	31	33	33	33	33	33	34
Botany	107	104	104	102	103	104	101	98
Cell biology	88	92	96	104	110	118	121	121
Ecology	25	26	27	28	27	31	31	30
Entomology/parasitology	47	48	49	48	49	49	48	48
Genetics	65	67	72	76	79	82	84	83
Microbio., immunology, & virology	233	237	243	249	260	261	265	264
Nutrition	98	103	108	112	114	119	123	123
Pathology	143	143	147	145	143	143	144	139
Pharmacology	165	162	163	166	167	168	168	163
Physiology	150	145	146	146	146	144	146	144
Zoology	50	49	49	47	50	50	49	45
Biosciences, n.e.c.	40	46	52	63	76	80	85	87
Psychology, total	453	465	487	510	515	532	548	553
Psychology, general	166	168	167	165	162	164	164	160
Clinical psychology	97	101	106	111	114	116	123	127
Psychology, n.e.c.	190	196	214	234	239	252	261	266
Social sciences, total	1,214	1,222	1,231	1,250	1,257	1,287	1,305	1,309
Agricultural economics	52	52	52	53	52	53	54	54
Anthropology (cultural & social)	117	121	125	127	129	131	134	134
Economics (except agricultural)	194	193	195	199	199	202	201	196
Geography	94	95	96	98	98	99	100	98
History and philosophy of science	23	23	21	19	20	21	21	23
Linguistics	70	69	71	70	69	69	70	72
Political science	307	304	306	312	317	323	329	330
Sociology	169	172	173	173	174	175	176	173
Sociology/anthropology	31	30	28	28	25	26	25	25
Social sciences, n.e.c.	157	163	164	171	174	188	195	204
Engineering, total	1,209	1,230	1,267	1,302	1,324	1,360	1,386	1,400
Aerospace engineering	41	42	44	48	50	52	53	52
Agricultural engineering	41	41	41	41	40	38	38	38
Biomedical engineering	49	50	51	56	56	57	59	61
Chemical engineering	133	133	138	139	139	140	140	142
Civil engineering	183	186	193	198	200	210	216	225
Electrical engineering	194	197	205	212	214	221	226	230
Engineering science	35	35	36	37	39	41	39	36
Industrial eng./manufacturing eng.	125	126	132	136	145	154	157	160
Mechanical engineering	173	174	177	182	182	184	186	186
Metallurgical/materials eng.	85	89	96	101	101	104	106	107
Mining engineering	26	27	28	28	30	29	26	24
Nuclear engineering	27	26	26	25	25	26	26	24
Petroleum engineering	19	19	19	19	19	19	20	19
Engineering, n.e.c.	78	85	81	80	84	85	94	96

See explanatory information, if any, and SOURCE at end of table.

Technical Table 2. Number of science, engineering, and health departments in doctorate-granting institutions, by detailed field: 1989-96

Field	1989	1990	1991	1992	1993	1994	1995	1996
Total, health fields	2,443	2,511	2,552	2,635	2,733	2,803	2,859	2,879
Medical fields, total	1,830	1,881	1,914	1,963	2,031	2,083	2,121	2,122
Anesthesiology	84	85	87	87	87	89	89	91
Cardiology	67	67	67	68	69	70	71	71
Oncology/cancer research	36	36	38	45	48	50	55	57
Endocrinology	73	74	74	73	72	74	74	74
Gastroenterology	64	65	65	66	68	71	71	71
Hematology	68	67	67	69	71	73	73	72
Neurology	125	130	135	137	145	153	154	151
Obstetrics and gynecology	91	92	92	95	96	96	96	95
Ophthalmology	78	80	80	80	81	81	81	79
Otorhinolaryngology	68	70	70	70	71	72	72	72
Pediatrics	105	107	107	109	111	115	116	118
Preventive medicine/community health	157	164	165	172	177	181	185	186
Psychiatry	98	101	100	101	103	107	107	104
Pulmonary disease	63	63	62	64	67	68	69	68
Radiology	122	128	131	135	137	139	141	138
Surgery	216	221	233	238	246	251	257	259
Clinical medicine, n.e.c.	315	331	341	354	382	393	410	416
Other health fields, total	613	630	638	672	702	720	738	757
Dental sciences	79	78	75	82	87	84	83	82
Nursing	119	122	125	131	135	139	145	143
Pharmaceutical sciences	81	83	84	89	91	92	94	97
Speech pathology/audiology	123	124	125	128	131	133	134	135
Veterinary sciences	37	41	41	42	44	45	46	46
Health related, n.e.c.	174	182	187	200	214	227	236	254

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Technical Table 3. Number of science, engineering, and health departments in master's-granting institutions, by detailed field: 1989-96

Field	1989	1990	1991	1992	1993	1994	1995	1996
Total, all surveyed fields	1,341	1,372	1,420	1,461	1,506	1,558	1,584	1,579
Total, science and engineering fields	1,191	1,215	1,250	1,280	1,318	1,359	1,371	1,354
Sciences, total	1,025	1,037	1,071	1,100	1,135	1,170	1,179	1,169
Physical sciences, total	120	122	125	123	128	129	126	120
Astronomy	0	0	0	0	0	0	0	0
Chemistry	81	82	82	82	82	82	78	75
Physics	31	32	33	32	34	34	34	32
Physical sciences, n.e.c.	8	8	10	9	12	13	14	13
Earth, atmos., & ocean sci., total	53	51	54	57	56	58	64	64
Atmospheric sciences	1	1	1	1	1	1	2	2
Geosciences	31	30	31	30	29	30	31	31
Oceanography	5	5	5	6	6	6	6	5
Earth, atmos., & ocean sci., n.e.c.	16	15	17	20	20	21	25	26
Mathematical sciences, total	101	99	102	105	111	111	111	110
Mathematics & applied mathematics	99	96	98	101	105	105	105	105
Statistics	2	3	4	4	6	6	6	5
Computer sciences	75	79	81	85	90	94	95	96
Agricultural sciences	30	25	26	27	27	33	34	32
Biological sciences, total	180	176	180	181	180	179	183	179
Anatomy	0	0	0	0	0	0	0	0
Biochemistry	3	3	3	3	4	5	5	5
Biology	141	139	141	140	136	134	134	134
Biometry/epidemiology	0	0	1	0	0	0	0	0
Biophysics	0	0	0	0	0	0	0	0
Botany	3	3	3	3	2	2	2	2
Cell biology	0	0	0	0	1	1	2	1
Ecology	3	3	3	3	3	3	3	2
Entomology/parasitology	0	0	0	0	0	0	0	0
Genetics	1	1	1	1	1	1	1	1
Microbio., immunology, & virology	3	2	2	2	2	2	2	2
Nutrition	10	10	10	12	14	15	17	16
Pathology	2	2	2	2	2	2	2	2
Pharmacology	1	1	1	1	1	0	0	0
Physiology	0	0	0	0	0	0	0	0
Zoology	2	2	3	3	2	2	2	2
Biosciences, n.e.c.	11	10	10	11	12	12	13	12
Psychology, total	196	208	214	226	237	244	241	244
Psychology, general	95	94	95	91	94	94	93	95
Clinical psychology	21	24	24	29	30	34	34	34
Psychology, n.e.c.	80	90	95	106	113	116	114	115
Social sciences, total	270	277	289	296	306	322	325	324
Agricultural economics	2	2	2	3	4	4	4	4
Anthropology (cultural & social)	11	12	12	12	12	12	12	12
Economics (except agricultural)	35	34	35	35	36	36	37	37
Geography	21	22	23	24	24	24	24	24
History and philosophy of science	0	0	0	0	0	0	0	0
Linguistics	5	4	6	7	7	7	7	7
Political science	99	100	102	104	105	112	114	114
Sociology	42	43	46	47	47	48	49	47
Sociology/anthropology	4	3	2	2	2	2	2	2
Social sciences, n.e.c.	51	57	61	62	69	77	76	77
Engineering, total	166	178	179	180	183	189	192	185
Aerospace engineering	3	3	2	2	2	4	4	3
Agricultural engineering	0	0	0	0	0	0	0	0
Biomedical engineering	3	3	3	3	4	4	4	3
Chemical engineering	7	7	8	8	8	8	9	9
Civil engineering	31	31	31	31	32	34	37	37
Electrical engineering	37	43	42	44	44	44	46	46
Engineering science	2	2	2	2	2	2	2	2
Industrial eng./manufacturing eng.	26	27	29	30	30	30	32	30
Mechanical engineering	24	26	25	24	25	25	26	24
Metallurgical/materials eng.	5	6	6	6	6	6	5	4
Mining engineering	4	4	4	4	4	4	2	2
Nuclear engineering	0	0	0	0	0	0	0	0
Petroleum engineering	2	2	2	2	2	2	2	2
Engineering, n.e.c.	22	24	25	24	24	26	23	23

See explanatory information, if any, and SOURCE at end of table.

Technical Table 3. Number of science, engineering, and health departments in master's-granting institutions, by detailed field: 1989-96

Field	1989	1990	1991	1992	1993	1994	1995	1996
Total, health fields	150	157	170	181	188	199	213	225
Medical fields, total	9	8	10	12	14	17	18	16
Anesthesiology	1	1	1	2	3	3	3	2
Cardiology	0	0	0	0	0	0	0	0
Oncology/cancer research	0	0	0	0	0	0	0	0
Endocrinology	0	0	0	0	0	0	0	0
Gastroenterology	0	0	0	0	0	0	0	0
Hematology	0	0	0	0	0	0	0	0
Neurology	0	0	0	0	0	0	0	0
Obstetrics and gynecology	0	0	0	0	0	0	0	0
Ophthalmology	0	0	0	0	0	0	0	0
Otorhinolaryngology	0	0	0	0	0	0	0	0
Pediatrics	0	0	0	0	0	0	0	0
Preventive medicine/community health	5	5	7	7	8	9	9	9
Psychiatry	1	1	1	1	1	2	2	1
Pulmonary disease	0	0	0	0	0	0	0	0
Radiology	0	0	0	0	0	0	1	1
Surgery	0	0	0	0	0	0	0	0
Clinical medicine, n.e.c.	2	1	1	2	2	3	3	3
Other health fields, total	141	149	160	169	174	182	195	209
Dental sciences	0	0	0	0	0	0	0	0
Nursing	45	46	50	53	56	59	68	71
Pharmaceutical sciences	3	3	2	2	2	1	1	1
Speech pathology/audiology	50	53	58	59	58	59	61	65
Veterinary sciences	1	1	1	1	1	1	1	1
Health related, n.e.c.	42	46	49	54	57	62	64	71

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Technical Table 4. Original departmental response rates: 1975-96

Year	Total	Complete response	Percent	Partial response	Percent	Non-response	Percent
1975	9,162	8,998	98.2	NA	NA	NA	NA
1976	9,275	9,148	98.6	NA	NA	NA	NA
1977	9,513	9,432	99.1	NA	NA	NA	NA
1978[1]	8,242	8,077	98.0	NA	NA	NA	NA
1979	9,796	9,446	96.4	NA	NA	NA	NA
1980	9,930	9,593	96.6	NA	NA	NA	NA
1981	9,917	8,594	86.7	613	6.2	710	7.2
1982	9,776	8,104	82.9	744	7.6	928	9.5
1983	9,663	8,070	83.5	816	8.4	777	8.0
1984[2]	8,748	7,490	85.6	643	7.4	615	7.0
1985[2]	9,025	7,818	86.6	672	7.4	535	5.9
1986[2]	9,097	7,817	85.9	779	8.6	501	5.5
1987[2]	9,254	8,030	86.8	715	7.7	509	5.5
1988	10,295	8,812	85.6	970	9.4	513	5.0
1989	10,318	8,908	86.3	891	8.6	519	5.0
1990	10,483	8,884	84.7	1,053	10.0	546	5.2
1991	10,705	9,052	84.6	1,186	11.1	467	4.4
1992	10,936	9,066	82.9	1,538	14.1	332	3.0
1993	11,146	9,156	82.1	1,555	14.0	435	3.9
1994	11,411	8,863	77.7	2,109	18.5	439	3.8
1995	11,598	9,514	82.0	1,730	14.9	354	3.1
1996	11,592	9,851	85.0	1,522	13.1	219	1.9

1 Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

2 Master's-granting institutions were surveyed on a sample basis from 1984 through 1987.

NOTE: Departments providing partial responses are included in the complete response column prior to 1981 and reported separately beginning in 1981.

KEY: NA = Not available

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Technical Table 5 Imputation for nonresponse in doctorate-granting institutions, by field and enrollment status: 1996

Area of science and engineering	Number of graduate departments		Total in survey			Number imputed			Imputation rate (percent)		
	In universe	Totally imputed	Full-time	Part-time	Postdoctorates	Full-time	Part-time	Postdoctorates	Full-time	Part-time	Postdoctorates
Total, all areas	10,013	201	303,586	127,045	37,019	6,169	2,360	1,070	2.0	1.9	2.9
Engineering	1,400	14	63,958	32,246	2,671	829	398	13	1.3	1.2	.5
Physical sciences	567	8	27,276	3,511	5,802	400	19	58	1.5	.5	1.0
Earth, atmospheric, & ocean sciences	346	7	10,256	3,416	861	246	90	11	2.4	2.6	1.3
Mathematical sciences	390	9	12,298	3,653	326	279	56	7	2.3	1.5	2.1
Computer sciences	277	4	15,547	13,430	247	545	145	8	3.5	1.1	3.2
Agricultural sciences	317	3	8,874	2,307	665	69	49	5	.8	2.1	.8
Biological sciences	1,975	38	45,816	7,796	14,918	1,011	163	322	2.2	2.1	2.2
Psychology	553	19	28,447	10,301	584	844	252	0	3.0	2.4	0
Social sciences	1,309	35	53,203	23,858	444	1,270	729	2	2.4	3.1	.5
Health fields	2,879	64	37,911	26,527	10,501	676	459	644	1.8	1.7	6.1

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Technical Table 6. Imputation for nonresponse in master's-granting institutions, by field and enrollment status: 1996

Area of science and engineering	Number of graduate departments		Total in survey			Number imputed			Imputation rate (percent)		
	In universe	Totally imputed	Full-time	Part-time	Postdoctorates	Full-time	Part-time	Postdoctorates	Full-time	Part-time	Postdoctorates
Total, all areas	1,579	18	24,782	39,113	81	236	871	0	1.0	2.2	0.0
Engineering	185	3	1,893	5,126	12	5	73	0	.3	1.4	0
Physical sciences	120	1	668	887	37	0	18	0	0	2.0	0
Earth, atmospheric, & ocean sciences	64	0	572	1,030	2	0	0	0	0	0	0
Mathematical sciences	110	0	668	1,396	0	0	0	0	0	0	0
Computer sciences	96	2	1,626	3,989	3	63	99	0	3.9	2.5	0
Agricultural sciences	32	0	424	309	12	0	0	0	0	0	0
Biological sciences	179	1	1,927	2,588	8	1	32	0	.1	1.2	0
Psychology	244	2	6,855	7,750	6	56	148	0	.8	1.9	0
Social sciences	324	8	3,756	7,913	0	87	432	0	2.3	5.5	0
Health fields	225	1	6,393	8,125	1	24	69	0	.4	.8	0

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Technical Table 7. Imputation rates for all departments at all graduate institutions: fall 1996

[Number of imputed departments = 1,741]

Items 5 and 6 Enrollment status, mechanism of support, and gender of S&E graduate students	Students receiving financial assistance										
	Federal sources (excluding loans)						Non-Federal sources			Self support (includ. loans & family sources)	Total for all sources (sum of columns A - J)
	DoD	HHS		NSF	Dept. of Agr.	Other Federal sources	Inst. support	Foreign sources	Other U.S. sources		
		NIH	Other HHS								
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
Item 5 Full-time graduate S&E students:											
Graduate fellowships	6.0	5.7	6.3	7.8	12.6	10.6	8.9	10.2	11.0	NA	9.1
Graduate traineeships	3.7	11.1	10.3	6.0	14.3	15.0	9.9	5.4	18.9	NA	10.9
Graduate research assistants	9.2	11.4	2.6	10.1	12.9	9.3	9.1	6.4	8.8	NA	8.8
Graduate teaching assistants	NA	1.1	11.1	0.8	14.0	9.5	10.6	NA	16.7	NA	9.7
Other types of support	5.8	14.8	30.2	9.9	2.8	12.0	14.1	11.5	8.9	14.3	13.9
Full-time total	8.1	10.9	9.1	9.4	12.7	10.1	10.3	9.9	9.8	14.3	2.0
Full-time women	11.8	11.0	9.1	8.0	12.7	10.8	11.0	7.8	9.4	15.3	3.6
Full-time first-time total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7
Full-time first-time women	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.7
Item 6 Part-time graduate S&E students:											
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.0
Women	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.4

Item 7 Race/ethnicity of full-time and part-time graduate S&E students, by sex	U.S. citizens and permanent residents							Foreign	Total (sum of columns A - H)
	Black non-Hispanic	American Indian/ Alaskan	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other	Unknown		
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
Men enrolled full-time	6.8	2.4	6.6	10.5	8.6	4.7	10.6	9.8	3.9
Women enrolled full-time	7.5	2.4	6.1	16.2	6.4	4.7	4.4	8.4	3.6
Full-time, total	7.2	2.3	6.3	13.5	7.5	4.7	7.7	9.3	2.0
Men enrolled part-time	10.1	2.2	9.3	13.5	10.3	4.4	8.0	10.8	4.7
Women enrolled part-time	9.5	2.1	8.1	15.3	8.6	5.8	6.2	11.4	4.4
Part-time, total	9.4	2.0	8.7	14.1	9.2	4.9	6.9	11.0	2.0

See explanatory information, if any, and SOURCE at end of table.

Technical Table 7. Imputation rates for all departments at all graduate institutions: fall 1996

[Number of imputed departments = 1,741]

Item 8 S&E postdoctorates and nonfaculty research staff with doctorates	Postdoctorates						Other non-faculty research staff with doctorates
	Source of support				Total for all sources (A - D)	Foreign postdoctorates	
	Federal			Non-Federal			
	Fellowships (A)	Traineeships (B)	Research grants (C)	(D)	(E)	(F)	(G)
Total	11.9	19.2	12.2	16.4	9.7	9.3	8.5
Women	11.7	16.4	12.5	15.2	9.2	11.0	8.4
With MD, DDS or DVM degrees	18.2	24.4	15.9	18.7	13.2	10.4	10.5

KEY: NA = not applicable

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Technical Table 8. Comparison of graduate enrollment data as originally published and as modified through the fall 1996 graduate student survey cycle: 1975-96

Year	Total, all institutions			Doctorate-granting institutions			Master's-granting institutions		
	Original total	Revised total	Percent change	Original total	Revised total	Percent change	Original total	Revised total	Percent change
	Total graduate enrollment in surveyed fields								
1975[1]	336,843	328,550	-2.5	290,662	294,987	1.5	46,181	33,563	-27.3
1976	345,979	333,755	-3.5	297,280	299,213	.7	48,699	34,542	-29.1
1977	362,978	345,416	-4.8	306,710	306,655	.0	56,268	38,761	-31.1
1978[2]	N/A	339,912	N/A	311,982	299,316	-4.1	N/A	40,596	N/A
1979	375,267	357,609	-4.7	321,770	315,159	-2.1	53,497	42,450	-20.6
1980	383,210	367,111	-4.2	333,658	324,542	-2.7	49,552	42,569	-14.1
1981	392,034	375,158	-4.3	340,203	331,358	-2.6	51,831	43,800	-15.5
1982	399,682	382,334	-4.3	347,414	337,531	-2.8	52,268	44,803	-14.3
1983	413,564	390,474	-5.6	358,276	344,317	-3.9	55,288	46,157	-16.5
1984[3]	415,064	394,670	-4.9	363,470	346,720	-4.6	51,594	47,950	-7.1
1985[3]	434,836	404,021	-7.1	371,052	356,159	-4.0	63,784	47,862	-25.0
1986[3]	446,102	415,542	-6.9	384,203	367,046	-4.5	61,899	48,496	-21.7
1987[3]	449,585	421,512	-6.2	388,681	372,576	-4.1	60,904	48,936	-19.7
1988	445,595	424,613	-4.7	391,683	378,066	-3.5	53,912	46,547	-13.7
1989	440,983	434,567	-1.5	385,025	385,391	.1	55,958	49,176	-12.1
1990	458,943	452,178	-1.5	398,405	398,848	.1	60,538	53,330	-11.9
1991	475,691	471,262	-.9	411,296	414,269	.7	64,395	56,993	-11.5
1992	495,397	493,632	-.4	427,792	433,038	1.2	67,605	60,594	-10.4
1993	506,678	504,449	-.4	440,875	440,972	.0	65,803	63,477	-3.5
1994	506,626	504,542	-.4	441,480	441,435	.0	65,146	63,107	-3.1
1995	501,510	499,702	-.4	436,328	435,611	-.2	65,182	64,091	-1.7
1996	494,526	N/A	N/A	430,631	N/A	N/A	63,895	N/A	N/A
	Full-time								
1975[1]	228,316	219,687	-3.8	210,641	207,260	-1.6	17,675	12,427	-29.7
1976	233,748	223,446	-4.4	215,355	211,079	-2.0	18,393	12,367	-32.8
1977	238,202	226,776	-4.8	218,226	213,024	-2.4	19,976	13,752	-31.2
1978[2]	N/A	223,030	N/A	217,588	208,717	-4.1	N/A	14,313	N/A
1979	243,331	231,790	-4.7	224,057	216,921	-3.2	19,274	14,869	-22.9
1980	249,111	238,448	-4.3	230,601	223,059	-3.3	18,510	15,389	-16.9
1981	253,428	242,076	-4.5	234,529	226,804	-3.3	18,899	15,272	-19.2
1982	255,959	244,796	-4.4	237,676	229,713	-3.4	18,283	15,083	-17.5
1983	263,800	252,055	-4.5	243,646	235,802	-3.2	20,154	16,253	-19.4
1984[3]	264,146	253,922	-3.9	246,848	236,914	-4.0	17,298	17,008	-1.7
1985[3]	269,319	257,287	-4.5	249,666	240,577	-3.6	19,653	16,710	-15.0
1986[3]	279,235	266,182	-4.7	259,980	249,288	-4.1	19,255	16,894	-12.3
1987[3]	285,200	271,066	-5.0	264,862	253,882	-4.1	20,338	17,184	-15.5
1988	288,619	275,194	-4.7	268,385	259,219	-3.4	20,234	15,975	-21.0
1989	286,619	282,719	-1.4	267,554	266,241	-.5	19,065	16,478	-13.6
1990	295,836	292,830	-1.0	275,262	274,821	-.2	20,574	18,009	-12.5
1991	308,669	307,040	-.5	286,756	287,300	.2	21,913	19,740	-9.9
1992	323,399	322,609	-.2	299,753	301,119	.5	23,646	21,490	-9.1
1993	330,249	329,679	-.2	307,181	307,063	.0	23,068	22,616	-2.0
1994	331,969	332,129	.0	307,964	308,779	.3	24,005	23,350	-2.7
1995	330,235	329,118	-.3	305,652	305,030	-.2	24,583	24,088	-2.0
1996	328,368	N/A	N/A	303,586	N/A	N/A	24,782	N/A	N/A

See explanatory information, if any, and SOURCE at end of table.

Technical Table 8. Comparison of graduate enrollment data as originally published and as modified through the fall 1996 graduate student survey cycle: 1975-96

Year	Total, all institutions			Doctorate-granting institutions			Master's-granting institutions		
	Original total	Revised total	Percent change	Original total	Revised total	Percent change	Original total	Revised total	Percent change
	Part-time								
1975[1]	108,527	108,863	0.3	80,021	87,727	9.6	28,506	21,136	-25.9
1976	112,231	110,309	-1.7	81,925	88,134	7.6	30,306	22,175	-26.8
1977	124,776	118,640	-4.9	88,484	93,631	5.8	36,292	25,009	-31.1
1978[2]	N/A	116,882	N/A	94,394	90,599	-4.0	N/A	26,283	N/A
1979	131,936	125,819	-4.6	97,713	98,238	.5	34,223	27,581	-19.4
1980	134,099	128,663	-4.1	103,057	101,483	-1.5	31,042	27,180	-12.4
1981	138,606	133,082	-4.0	105,674	104,554	-1.1	32,932	28,528	-13.4
1982	143,723	137,538	-4.3	109,738	107,818	-1.7	33,985	29,720	-12.5
1983	149,764	138,419	-7.6	114,630	108,515	-5.3	35,134	29,904	-14.9
1984[3]	150,918	140,748	-6.7	116,622	109,806	-5.8	34,296	30,942	-9.8
1985[3]	165,517	146,734	-11.3	121,386	115,582	-4.8	44,131	31,152	-29.4
1986[3]	166,867	149,360	-10.5	124,223	117,758	-5.2	42,644	31,602	-25.9
1987[3]	164,385	150,446	-8.5	123,819	118,694	-4.1	40,566	31,752	-21.7
1988	156,976	149,419	-4.8	123,298	118,847	-3.6	33,678	30,572	-9.2
1989	154,364	151,848	-1.6	117,471	119,150	1.4	36,893	32,698	-11.4
1990	163,107	159,348	-2.3	123,143	124,027	.7	39,964	35,321	-11.6
1991	167,022	164,222	-1.7	124,540	126,969	2.0	42,482	37,253	-12.3
1992	171,998	171,023	-.6	128,039	131,919	3.0	43,959	39,104	-11.0
1993	176,429	174,770	-.9	133,694	133,909	.2	42,735	40,861	-4.4
1994	174,657	172,413	-1.3	133,516	132,656	-.6	41,141	39,757	-3.4
1995	171,275	170,584	-.4	130,676	130,581	-.1	40,599	40,003	-1.5
1996	166,158	N/A	N/A	127,045	N/A	N/A	39,113	N/A	N/A

[1] The 1976 survey also collected 1975 data from master's-granting institutions.

[2] Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

[3] These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See "Technical Notes" for further information.

NOTE: The percent change column is presented as a measure of retroactive changes in survey definitions. Three survey changes in the late 1980's and early 1990's had a retroactive effect on figures reported for earlier years. First, degree-granting status (doctorate or master's) used to be determined by an institution's status each year. Beginning in 1992, degree-granting status was determined by the status reported in the latest survey year. This change shifted numerous institutions (and students) from master's-granting to doctorate-granting categories for years before 1992. Second, in 1988 guidelines to determine S&E departments were tightened. This change meant retroactively dropping departments in fields like educational psychology, social work, and cultural studies from the survey population. Third, improved estimates were generated for years in which enrollments at master's-granting institutions were sampled (1984-87).

KEY: N/A = Not available

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

List of Tables

Table *Page*

All Institutions

Long-term Trends (1975–96)

1. Graduate students in science, engineering, and health fields in all institutions, by field: 1975–96 27

2. Male graduate students in science, engineering, and health fields in all institutions, by field: 1975–96 28

3. Female graduate students in science, engineering, and health fields in all institutions, by field: 1975–96 29

4. Full-time graduate students in science, engineering, and health fields in all institutions, by field: 1975–96 30

5. Male full-time graduate students in science, engineering, and health fields in all institutions, by field: 1975–96 31

6. Female full-time graduate students in science, engineering, and health fields in all institutions, by field: 1975–96 32

7. Full-time graduate students with U.S. citizenship in science, engineering, and health fields in all institutions, by field: 1975–96 33

8. Full-time graduate students without U.S. citizenship in science, engineering, and health fields in all institutions, by field: 1975–96 34

Trends by Detailed Field (1989–96)

9. Graduate students in science, engineering, and health fields in all institutions, by detailed field: 1989–96 35

10. Male graduate students in science, engineering, and health fields in all institutions, by detailed field: 1989–96 37

11. Female graduate students in science, engineering, and health fields in all institutions, by detailed field: 1989–96 38

12. Graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and racial/ethnic background of U.S. citizens: 1989–96 39

Table *Page*

13. Graduate students in science, engineering, and health fields in all institutions, by sex, field, and citizenship, and by racial/ethnic background of U.S. citizens: 1994–96 42

14. Graduate students in science, engineering, and health fields in public institutions, by detailed field: 1989–96 45

15. Graduate students in science, engineering, and health fields in private institutions, by detailed field: 1989–96 46

16. Graduate students in science and engineering fields in all institutions, by field and Carnegie classification: 1989–96 47

17. Full-time graduate students in science, engineering, and health fields in all institutions, by detailed field: 1989–96 49

18. Male full-time graduate students in science, engineering, and health fields in all institutions, by detailed field: 1989–96 50

19. Female full-time graduate students in science, engineering, and health fields in all institutions, by detailed field: 1989–96 51

20. Full-time graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and racial/ethnic background of U.S. citizens: 1989–96 52

21. Full-time graduate science, engineering, and health students without U.S. citizenship in all institutions, by detailed field: 1989–96 55

22. Full-time graduate students in science and engineering fields in all institutions, by field and Carnegie classification: 1989–96 56

23. Full-time graduate students in science, engineering, and health fields in all institutions, by field and source of support: 1989–96 58

24. Full-time graduate students in science, engineering, and health fields in all institutions, by field and mechanism of support: 1989–96 62

25. Full-time graduate students in science and engineering fields in all institutions, by mechanism and source of support: 1989–96 64

26. Full-time students in graduate school for the first time in science, engineering, and health fields in all institutions, by detailed field: 1989–96 66

Current Year Tables by Sex, Detailed Field, Citizenship, and Race/Ethnicity

27. Graduate students in science, engineering, and health fields in all institutions, by detailed field, citizenship, and racial/ethnic background of U.S. citizens: 1996 67

Table *Page*

28. Male graduate students in science, engineering, and health fields in all institutions, by detailed field, citizenship, and racial/ethnic background of U.S. citizens: 1996 69

29. Female graduate students in science, engineering, and health fields in all institutions, by detailed field, citizenship, and racial/ethnic background of U.S. citizens: 1996 71

Current Year Tables by Institution and Geographic Area

30. Graduate science students in all institutions, by geographic division, State, institution, and citizenship, and by racial/ethnic background of U.S. citizens: 1996 73

31. Graduate engineering students in all institutions, by geographic division, State, institution, and citizenship, and by racial/ethnic background of U.S. citizens: 1996 85

Doctorate-Granting Institutions

32. Graduate students in science, engineering, and health fields in doctorate-granting institutions, by detailed field: 1989–96 97

33. Graduate students in science, engineering, and health fields in public doctorate-granting institutions, by detailed field: 1989–96 99

34. Graduate students in science, engineering, and health fields in private doctorate-granting institutions, by detailed field: 1989–96 100

35. Graduate students in science and engineering fields in doctorate–granting institutions, by enrollment status, citizenship, and racial/ethnic background of U.S. citizens: 1989–96 101

36. Graduate students in science, engineering, and health fields in doctorate-granting institutions, by detailed field, citizenship, and racial/ethnic background of U.S. citizens: 1996 102

37. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by detailed field: 1989–96 104

38. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field and source of support: 1989–96 105

39. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field and mechanism of support: 1989–96 109

40. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by detailed field and mechanism of support: 1996 111

Table *Page*

41. Full-time graduate students in science and engineering fields in doctorate-granting institutions, by mechanism and source of support: 1989–96 112

42. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by sex, source of support, and field: 1996 114

43. Full-time graduate science, engineering, and health students with U.S. citizenship in doctorate-granting institutions, by detailed field: 1989–96 116

44. Full-time graduate science, engineering, and health students without U.S. citizenship in doctorate-granting institutions, by detailed field: 1989–96 117

45. Graduate students in science and engineering fields in doctorate-granting institutions, ranked by 1996 total graduate science and engineering students: 1989–96 118

46. Science, engineering, and health postdoctoral appointees in doctorate-granting institutions, by detailed field: 1989–96 124

47. Science, engineering, and health postdoctoral appointees in doctorate-granting institutions, by detailed field and source of support, and number of postdoctoral appointees without U.S. citizenship: 1996 125

48. Nonfaculty research scientists, engineers, and health professionals with doctorates in doctorate-granting institutions, by detailed field: 1989–96 127

Historically Black Colleges and Universities

49. Graduate students in science, engineering, and health fields in historically black colleges and universities, by detailed field, citizenship, and racial/ethnic background of U.S. citizens: 1996 128

50. Graduate students in science and engineering fields in historically black colleges and universities, by geographic distribution, citizenship, and racial/ethnic background of U.S. citizens: 1996 129

51. Black graduate students in science, engineering, and health fields in all institutions and historically black colleges and universities, by field: 1990–96 131

52. Black graduate students in science, engineering, and health fields in all institutions and historically black colleges and universities, by field and sex: 1994–96 132

53. Full-time black graduate students in science, engineering, and health fields in all institutions and historically black colleges and universities, by field: 1990-96 133

54. Full-time black graduate students in science, engineering, and health fields in all institutions and historically black colleges and universities, by field and sex: 1994–96 134

Table 1. Graduate students in science, engineering, and health fields in all institutions, by field: 1975-96

Year	Total, science and engineering	Sciences								
		Sciences, total	Physical sciences	Earth, atmospheric, & ocean sciences	Mathematical sciences	Computer sciences	Agricultural sciences	Biological sciences	Psychology	Social sciences
1975	303,031	234,760	26,310	12,079	16,892	8,415	10,702	46,398	36,191	77,773
1976	305,465	238,808	26,631	12,819	17,071	8,627	11,285	47,728	37,458	77,189
1977	311,741	243,056	26,855	13,455	16,052	9,108	11,677	49,234	38,617	78,058
1978[1]	304,301	236,604	26,274	13,276	14,812	9,847	11,869	47,923	37,522	75,081
1979	319,092	247,364	26,695	13,737	15,031	11,690	12,240	48,199	39,766	80,006
1980	325,649	251,337	26,934	14,051	15,311	13,578	12,452	47,596	40,610	80,805
1981	332,041	252,486	27,357	14,266	15,881	16,437	12,355	46,639	40,666	78,885
1982	338,916	255,229	28,186	15,020	17,157	19,812	12,583	45,970	40,073	76,428
1983	347,017	255,898	29,453	15,453	17,358	23,333	12,429	45,644	40,905	71,323
1984[2]	349,698	256,986	30,056	15,505	17,443	25,526	12,226	45,763	40,931	69,530
1985[2]	358,049	262,068	30,981	15,420	17,563	29,769	11,561	46,112	40,721	69,941
1986[2]	368,104	266,230	32,246	15,066	17,949	31,349	11,458	46,764	41,241	70,157
1987[2]	373,341	269,388	32,727	14,371	18,508	32,051	11,118	46,747	42,612	71,254
1988	375,277	272,448	32,962	13,867	19,077	32,227	11,135	47,565	43,963	71,652
1989	382,747	278,704	33,616	13,643	19,247	32,482	11,190	48,852	45,528	74,146
1990	397,135	289,510	34,075	13,984	19,774	34,257	11,316	49,989	48,167	77,948
1991	412,697	299,121	34,710	14,480	19,952	34,610	11,506	51,778	51,343	80,742
1992	430,644	312,609	35,348	15,347	20,355	36,293	11,827	54,177	53,484	85,778
1993	435,886	319,028	35,318	15,805	20,000	36,189	11,914	56,452	54,557	88,793
1994	431,251	318,228	34,449	16,042	19,579	34,128	12,199	58,143	54,554	89,134
1995	422,525	315,326	33,417	15,805	18,509	33,432	12,367	58,706	53,641	89,449
1996	415,570	312,347	32,342	15,274	18,015	34,592	11,914	58,127	53,353	88,730

Year	Engineering									Health fields
	Engineering, total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical & materials engineering	Other engineering	
1975	68,271	1,670	5,034	12,560	16,320	11,663	8,601	2,352	10,071	25,519
1976	66,657	1,477	5,205	11,995	15,926	10,687	8,313	2,375	10,679	28,290
1977	68,685	1,518	5,201	12,335	17,406	10,438	8,722	2,559	10,506	33,675
1978[1]	67,697	1,463	5,341	12,358	17,127	9,494	8,638	2,570	10,706	35,611
1979	71,728	1,481	5,605	12,822	17,715	10,729	9,251	2,756	11,369	38,517
1980	74,312	1,737	6,015	13,097	19,132	9,698	9,888	2,910	11,835	41,462
1981	79,555	1,883	6,496	14,089	20,113	9,737	10,618	3,125	13,494	43,117
1982	83,687	1,941	7,189	14,122	21,927	9,577	11,467	3,124	14,340	43,418
1983	91,119	2,305	7,563	14,910	25,295	9,247	12,911	3,447	15,441	43,457
1984[2]	92,712	2,340	7,373	15,192	26,388	9,282	13,855	3,657	14,625	44,972
1985[2]	95,991	2,538	7,150	14,902	28,203	10,499	14,157	3,943	14,599	45,962
1986[2]	101,874	2,804	7,012	14,976	29,969	11,529	15,713	4,208	15,663	47,438
1987[2]	103,953	3,015	7,111	14,682	31,399	12,220	16,366	4,366	14,794	48,171
1988	102,829	3,223	6,618	14,811	32,035	11,393	16,151	4,337	14,261	49,336
1989	104,043	3,524	6,460	14,909	33,257	11,094	16,265	4,594	13,940	51,820
1990	107,625	3,934	6,735	15,542	33,722	11,248	16,879	4,941	14,624	55,043
1991	113,576	4,120	7,127	17,398	35,182	12,676	17,730	5,160	14,183	58,565
1992	118,035	4,036	7,397	19,572	36,460	13,525	18,637	5,512	12,896	62,988
1993	116,858	3,940	7,516	19,583	35,314	13,596	18,477	5,363	13,069	68,563
1994	113,023	3,715	7,608	19,925	33,050	13,661	17,761	5,191	12,112	73,291
1995	107,199	3,343	7,424	19,218	30,747	13,143	16,363	4,920	12,041	77,177
1996	103,223	3,208	7,373	18,528	29,736	12,399	15,509	4,713	11,757	78,956

[1] Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

[2] These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1934 through 1987. See "Technical Notes" for further information.

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering.

BEST COPY AVAILABLE

Table 2. Male graduate students in science, engineering, and health fields in all institutions, by field: 1975-96

Year	Total, science and engineering	Sciences									Engineering									Health fields
		Sciences, total	Physical sciences	Earth, atmospheric, & ocean sciences	Mathematical sciences	Computer sciences	Agricultural sciences	Biological sciences	Psychology	Social sciences	Engineering, total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical & materials engineering	Other engineering	
1975	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977	233,818	168,833	22,816	11,176	11,933	7,549	9,570	32,511	20,518	52,760	64,985	1,485	4,827	11,507	16,696	9,683	8,449	2,376	9,962	11,109
1978[1]	NA	NA	NA	NA	NA	9,367	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979	229,812	163,960	22,202	10,850	11,009	10,491	9,575	30,318	19,424	51,215	65,852	1,432	4,991	11,503	16,782	9,473	8,782	2,468	10,421	11,028
1980	231,253	163,280	22,338	10,844	11,247	12,228	9,594	29,295	19,027	50,444	67,973	1,663	5,336	11,732	18,149	8,343	9,354	2,607	10,789	11,707
1981	232,193	160,384	22,346	10,848	11,400	14,366	9,533	27,992	17,900	48,135	71,809	1,816	5,718	12,515	18,837	8,194	9,987	2,735	12,007	11,367
1982	235,340	160,428	22,767	11,297	11,552	16,719	9,498	26,797	16,976	46,648	74,912	1,831	6,288	12,373	20,376	7,958	10,748	2,704	12,634	10,958
1983	240,498	159,186	23,576	11,552	11,632	18,653	9,290	26,293	16,648	42,950	81,312	2,182	6,547	13,051	23,227	7,729	12,106	2,999	13,471	10,430
1984[2]	242,152	159,737	23,898	11,632	12,209	22,208	9,098	26,246	16,180	41,765	82,415	2,208	6,401	13,165	24,175	7,674	12,899	3,189	12,704	10,501
1985[2]	247,421	162,510	24,474	11,493	12,275	23,497	8,570	26,208	15,597	41,751	84,911	2,375	6,146	12,755	25,768	8,719	13,146	3,340	12,662	10,795
1986[2]	253,686	164,177	25,384	11,119	12,470	24,036	8,505	26,293	15,377	41,532	89,509	2,604	5,973	12,829	27,061	9,434	14,554	3,533	13,521	11,049
1987[2]	256,149	165,159	25,613	10,592	12,912	24,033	8,166	26,314	15,683	41,843	90,990	2,791	5,957	12,579	28,301	9,976	15,070	3,637	12,679	11,795
1988	254,005	164,300	25,465	10,062	13,301	24,494	8,038	26,304	15,502	41,595	89,705	2,996	5,543	12,517	28,757	9,300	14,749	3,581	12,262	11,407
1989	256,849	166,406	25,815	9,785	13,262	26,058	8,045	26,618	15,822	42,714	90,443	3,281	5,431	12,474	29,742	8,964	14,867	3,784	11,880	11,884
1990	263,394	170,441	26,007	9,865	13,575	26,340	7,981	26,947	16,556	44,186	92,953	3,645	5,589	12,853	30,007	9,111	15,437	4,048	12,263	12,284
1991	271,845	173,984	26,146	10,025	13,654	27,838	7,939	27,643	16,650	45,681	97,861	3,793	5,870	14,296	31,311	10,321	16,219	4,173	11,878	13,053
1992	280,397	179,595	26,504	10,489	13,806	27,767	8,059	28,702	16,567	47,547	100,802	3,688	6,003	15,918	32,167	10,870	16,939	4,443	10,774	13,837
1993	279,289	180,123	26,116	10,745	13,362	26,043	7,826	29,399	16,416	47,765	99,166	3,583	6,017	15,725	30,992	11,003	16,703	4,336	10,807	15,213
1994	272,120	177,146	25,290	10,689	13,044	25,306	7,911	29,988	15,877	47,237	94,974	3,357	6,082	14,986	28,946	10,866	15,938	4,122	9,949	16,253
1995	262,327	173,142	24,327	10,336	12,248	25,306	7,935	29,876	15,460	45,795	89,185	2,992	5,863	14,228	26,652	10,388	14,686	3,861	9,757	17,065
1996	253,738	168,767	23,294	9,760	11,794	25,802	7,502	29,360	15,460	45,795	84,971	2,856	5,731	14,228	25,607	9,685	13,873	3,653	9,338	18,119

[1] Master's-granting institutions were not surveyed in 1978.

[2] These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See "Technical Notes" for further information.

KEY: NA = Not available

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering.

Table 3. Female graduate students in science, engineering, and health fields in all institutions, by field: 1975-96

Year	Total, science and engineering	Sciences								
		Sciences, total	Physical sciences	Earth, atmospheric, & ocean sciences	Mathematical sciences	Computer sciences	Agricultural sciences	Biological sciences	Psychology	Social sciences
1975	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977	77,923	74,223	4,039	2,279	4,119	1,559	2,107	16,723	18,099	25,298
1978[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979	89,280	83,404	4,493	2,887	4,022	2,323	2,665	17,881	20,342	28,791
1980	94,396	88,057	4,596	3,207	4,064	3,087	2,858	18,301	21,583	30,361
1981	99,848	92,102	5,009	3,418	4,481	4,209	2,822	18,647	22,766	30,750
1982	103,576	94,801	5,419	3,723	5,078	5,446	3,085	19,173	23,097	29,780
1983	106,519	96,712	5,877	3,901	5,200	6,614	3,139	19,351	24,257	28,373
1984[2]	107,546	97,249	6,158	3,873	5,168	6,873	3,138	19,517	24,751	27,771
1985[2]	110,638	99,558	6,507	3,927	5,354	7,561	2,991	19,904	25,124	28,190
1986[2]	114,418	102,053	6,862	3,947	5,479	7,852	2,953	20,471	25,864	28,625
1987[2]	117,192	104,229	7,114	3,779	5,596	8,015	2,952	20,433	26,929	29,411
1988	121,272	108,148	7,497	3,805	5,776	8,194	3,097	21,261	28,461	30,057
1989	125,898	112,298	7,801	3,858	5,985	7,988	3,145	22,234	29,855	31,432
1990	133,741	119,069	8,068	4,119	6,199	8,199	3,335	23,042	32,345	33,762
1991	140,852	125,137	8,564	4,455	6,298	8,270	3,567	24,135	34,787	35,061
1992	150,247	133,014	8,844	4,858	6,549	8,455	3,768	25,475	36,834	38,231
1993	156,597	138,905	9,202	5,060	6,638	8,422	4,088	27,053	37,990	40,452
1994	159,131	141,082	9,159	5,353	6,535	8,085	4,288	28,155	38,138	41,369
1995	160,198	142,184	9,090	5,469	6,261	8,126	4,432	28,830	37,764	42,212
1996	161,832	143,580	9,048	5,514	6,221	8,790	4,412	28,767	37,893	42,935

Year	Engineering									Health fields
	Engineering, total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical & materials engineering	Other engineering	
1975	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977	3,700	33	374	828	710	755	273	183	544	22,566
1978[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979	5,876	49	614	1,319	933	1,256	469	288	948	27,489
1980	6,339	74	679	1,365	983	1,355	534	303	1,046	29,755
1981	7,746	67	778	1,574	1,276	1,543	631	390	1,487	31,750
1982	8,775	110	901	1,749	1,551	1,619	719	420	1,706	32,460
1983	9,807	123	1,016	1,859	2,068	1,518	805	448	1,970	33,027
1984[2]	10,297	132	972	2,027	2,213	1,608	956	468	1,921	34,471
1985[2]	11,080	163	1,004	2,147	2,435	1,780	1,011	603	1,937	35,167
1986[2]	12,365	200	1,039	2,147	2,908	2,095	1,159	675	2,142	36,389
1987[2]	12,963	224	1,154	2,103	3,098	2,244	1,296	729	2,115	36,376
1988	13,124	227	1,075	2,294	3,278	2,093	1,402	756	1,999	37,929
1989	13,600	243	1,029	2,435	3,515	2,110	1,398	810	2,060	39,936
1990	14,672	289	1,146	2,689	3,715	2,137	1,442	893	2,361	42,759
1991	15,715	327	1,257	3,102	3,871	2,355	1,511	987	2,305	45,512
1992	17,233	348	1,394	3,654	4,293	2,655	1,698	1,069	2,122	49,151
1993	17,692	357	1,499	3,858	4,322	2,593	1,774	1,027	2,262	53,350
1994	18,049	358	1,526	4,211	4,104	2,795	1,823	1,069	2,163	57,038
1995	18,014	351	1,561	4,232	4,095	2,755	1,677	1,059	2,284	60,112
1996	18,252	352	1,642	4,300	4,129	2,714	1,636	1,060	2,419	60,837

[1] Master's-granting institutions were not surveyed in 1978.

[2] These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See "Technical Notes" for further information.

KEY: NA = Not available

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 4. Full-time graduate students in science, engineering, and health fields in all institutions, by field: 1975-96

Year	Total science and engineering	Sciences								
		Sciences, total	Physical sciences	Earth, atmospheric, & ocean sciences	Mathematical sciences	Computer sciences	Agricultural sciences	Biological sciences	Psychology	Social sciences
1975	202,300	164,538	21,916	9,557	10,694	4,473	8,889	36,874	24,105	48,030
1976	204,861	167,979	22,252	10,091	10,952	4,748	9,436	37,905	25,643	46,952
1977	206,452	169,296	22,505	10,424	10,365	4,604	9,711	38,415	25,703	47,569
1978[1]	201,782	164,277	22,135	10,369	9,769	4,930	9,727	37,788	24,754	44,805
1979	209,044	169,077	22,535	10,625	9,667	5,853	9,952	37,996	25,848	46,601
1980	214,465	171,838	22,917	10,871	9,901	6,587	10,168	37,690	26,671	47,033
1981	218,003	172,278	23,307	10,934	10,152	7,445	10,312	37,277	26,570	46,281
1982	221,921	172,166	24,038	11,319	10,813	9,171	10,136	36,688	25,667	44,334
1983	229,456	175,548	25,204	11,968	10,955	10,600	9,976	36,740	26,561	43,544
1984[2]	231,015	175,848	25,852	11,734	11,309	11,436	9,908	37,114	25,969	42,526
1985[2]	233,992	178,096	26,669	11,334	11,816	13,861	9,250	37,001	25,335	42,830
1986[2]	242,826	182,660	27,762	11,249	12,388	15,020	9,341	37,809	26,255	42,836
1987[2]	247,205	185,273	28,412	10,435	13,043	15,336	9,094	38,235	27,256	43,462
1988	250,657	187,650	28,574	10,192	13,512	15,133	9,122	39,209	28,118	43,790
1989	256,906	192,531	29,207	10,021	13,681	15,606	9,070	40,348	29,348	45,250
1990	265,399	199,422	29,485	10,244	13,865	16,689	9,100	40,945	30,618	48,476
1991	277,174	206,140	30,117	10,373	14,256	16,516	9,289	42,700	32,258	50,631
1992	290,510	216,084	30,673	10,986	14,679	17,486	9,452	44,389	34,162	54,257
1993	294,030	220,233	30,611	11,367	14,530	17,374	9,468	46,481	34,782	55,620
1994	293,048	221,482	30,043	11,470	14,226	16,674	9,492	48,017	35,288	56,272
1995	287,223	219,449	28,902	11,275	13,410	16,490	9,620	48,300	35,222	56,230
1996	284,064	218,213	27,944	10,828	12,966	17,173	9,298	47,743	35,302	56,959

Year	Engineering									Health fields
	Engineering, total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical & materials engineering	Other engineering	
1975	37,762	1,245	3,515	7,363	8,278	4,152	4,931	1,787	6,491	17,387
1976	36,882	1,165	3,691	7,025	8,147	3,578	4,919	1,860	6,497	18,585
1977	37,156	1,187	3,873	7,094	8,528	3,343	4,883	1,951	6,297	20,324
1978[1]	37,505	1,140	3,938	7,335	8,509	3,249	4,950	1,973	6,411	21,248
1979	39,967	1,152	4,218	7,623	9,039	3,743	5,428	2,135	6,629	22,746
1980	42,627	1,327	4,490	7,958	9,963	3,736	5,841	2,254	7,058	23,983
1981	45,725	1,483	4,989	8,799	10,450	3,603	6,422	2,454	7,525	24,073
1982	49,755	1,522	5,608	9,381	11,533	3,807	7,267	2,478	8,159	22,875
1983	53,908	1,840	5,869	9,804	13,265	3,288	8,330	2,704	8,808	22,599
1984[2]	55,167	1,854	5,734	10,086	13,925	3,393	8,698	2,872	8,605	22,907
1985[2]	55,896	1,994	5,546	9,749	14,799	3,456	8,875	3,093	8,384	23,295
1986[2]	60,166	2,154	5,594	9,971	16,290	3,807	9,789	3,370	9,191	23,356
1987[2]	61,932	2,372	5,674	9,628	17,101	4,156	10,230	3,436	9,335	23,861
1988	63,007	2,533	5,359	9,946	17,706	4,295	10,416	3,466	9,286	24,537
1989	64,375	2,772	5,282	9,964	18,466	4,658	10,492	3,720	9,021	25,813
1990	65,977	3,010	5,443	10,128	18,675	4,770	10,867	3,930	9,154	27,431
1991	71,034	3,325	5,788	11,328	19,904	5,598	11,687	4,058	9,346	29,866
1992	74,426	3,306	5,946	12,454	20,996	6,081	12,383	4,274	8,986	32,099
1993	73,797	3,262	6,041	12,458	20,370	5,902	12,395	4,249	9,120	35,649
1994	71,566	3,000	6,105	12,641	19,412	5,910	11,875	4,108	8,515	39,081
1995	67,774	2,693	5,957	12,248	18,187	5,342	11,128	3,880	8,339	41,895
1996	65,851	2,576	5,909	11,791	17,989	5,128	10,690	3,693	8,075	44,304

[1] Master's-granting institutions were not surveyed in 1978; totals represent estimates based on 1977 and 1979 data.

[2] These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See "Technical Notes" for further information.

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering.

Table 5. Male full-time graduate students in science, engineering, and health fields in all institutions, by field: 1975-96

Year	Total, science and engineering	Sciences								
		Sciences, total	Physical sciences	Earth, atmospheric, & ocean sciences	Mathematical sciences	Computer sciences	Agricultural sciences	Biological sciences	Psychology	Social sciences
1975	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976	156,169	121,312	19,205	8,457	8,476	4,006	7,945	26,183	14,591	32,449
1977	154,398	119,499	19,293	8,641	8,083	3,845	7,903	25,866	13,949	31,919
1978[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979	151,981	115,444	19,044	8,404	7,497	4,803	7,745	24,480	13,277	30,194
1980	153,138	114,365	19,214	8,388	7,595	5,184	7,778	23,804	12,779	29,623
1981	154,075	112,963	19,306	8,361	7,612	5,718	7,884	23,189	12,007	28,886
1982	156,404	111,896	19,641	8,532	8,022	6,860	7,592	22,144	11,223	27,882
1983	161,537	113,248	20,371	8,995	8,037	7,961	7,448	21,961	11,361	27,114
1984[2]	162,399	113,279	20,755	8,876	8,328	8,693	7,328	22,012	10,714	26,573
1985[2]	164,198	114,583	21,241	8,500	8,614	10,806	6,853	21,798	10,232	26,539
1986[2]	169,871	116,675	22,022	8,336	8,984	11,703	6,955	21,992	10,263	26,420
1987[2]	172,140	117,491	22,384	7,759	9,481	12,005	6,716	22,099	10,422	26,625
1988	172,342	116,954	22,208	7,444	9,794	11,795	6,640	22,404	10,199	26,470
1989	175,106	118,867	22,547	7,268	9,746	12,355	6,557	22,736	10,467	27,191
1990	178,695	121,416	22,664	7,317	9,821	13,218	6,454	22,789	10,642	28,511
1991	185,090	123,739	22,845	7,197	10,035	13,035	6,424	23,498	10,957	29,748
1992	191,791	128,029	23,173	7,588	10,250	13,936	6,454	24,230	11,171	31,227
1993	190,864	128,266	22,888	7,815	10,096	13,791	6,281	24,920	11,189	31,286
1994	186,675	126,686	22,277	7,676	9,810	13,127	6,166	25,493	11,131	31,006
1995	179,820	123,542	21,238	7,387	9,213	12,840	6,158	25,283	10,903	30,520
1996	174,756	120,731	20,405	6,954	8,797	13,088	5,847	24,737	10,722	30,181

Year	Engineering									Health fields
	Engineering, total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical & materials engineering	Other engineering	
1975	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976	34,857	1,142	3,457	6,512	7,850	3,199	4,797	1,751	6,149	7,503
1977	34,899	1,160	3,595	6,553	8,146	2,967	4,742	1,809	5,927	7,490
1978[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979	36,537	1,116	3,789	6,729	8,585	3,164	5,170	1,922	6,062	7,595
1980	38,773	1,273	4,025	7,059	9,405	3,071	5,525	2,023	6,392	7,725
1981	41,112	1,432	4,456	7,673	9,739	2,915	6,075	2,167	6,655	7,403
1982	44,508	1,449	4,936	8,140	10,715	3,042	6,834	2,170	7,222	6,869
1983	48,289	1,760	5,100	8,509	12,302	2,673	7,847	2,380	7,718	6,678
1984[2]	49,120	1,768	5,002	8,648	12,775	2,769	8,137	2,518	7,503	6,675
1985[2]	49,615	1,868	4,792	8,257	13,591	2,821	8,316	2,654	7,316	6,747
1986[2]	53,196	2,006	4,806	8,484	14,823	3,073	9,162	2,849	7,993	6,707
1987[2]	54,649	2,205	4,800	8,230	15,552	3,422	9,498	2,867	8,075	7,292
1988	55,388	2,365	4,567	8,381	16,024	3,559	9,581	2,887	8,024	7,231
1989	56,239	2,592	4,486	8,315	16,644	3,751	9,637	3,081	7,733	7,685
1990	57,279	2,811	4,547	8,347	16,719	3,862	10,019	3,238	7,736	8,029
1991	61,351	3,071	4,803	9,309	17,739	4,556	10,745	3,316	7,812	8,450
1992	63,762	3,043	4,849	10,126	18,570	4,906	11,297	3,467	7,504	9,033
1993	62,598	2,971	4,875	9,934	17,926	4,729	11,210	3,447	7,506	9,926
1994	59,989	2,722	4,912	9,855	17,021	4,612	10,658	3,268	6,941	10,753
1995	56,278	2,417	4,734	9,431	15,747	4,191	9,993	3,064	6,701	11,367
1996	54,025	2,293	4,594	8,937	15,441	4,037	9,500	2,878	6,345	12,355

1 Master's-granting institutions were not surveyed in 1978.

2 These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See "Technical Notes" for further information.

KEY: NA = Not available

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering.

Table 6. Female full-time graduate students in science, engineering, and health fields in all institutions, by field: 1975-96

Year	Total science and engineering	Sciences								
		Sciences, total	Physical sciences	Earth, atmospheric, & ocean sciences	Mathematical sciences	Computer sciences	Agricultural sciences	Biological sciences	Psychology	Social sciences
1975	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976	48,692	46,667	3,047	1,634	2,476	742	1,491	11,722	11,052	14,503
1977	52,054	49,797	3,212	1,783	2,282	759	1,808	12,549	11,754	15,650
1978[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979	57,063	53,633	3,491	2,221	2,170	1,050	2,207	13,516	12,571	16,407
1980	61,327	57,473	3,703	2,483	2,306	1,403	2,390	13,886	13,892	17,410
1981	63,928	59,315	4,001	2,573	2,540	1,727	2,428	14,088	14,563	17,395
1982	65,517	60,270	4,397	2,787	2,791	2,311	2,544	14,544	14,444	16,452
1983	67,919	62,300	4,833	2,973	2,918	2,639	2,528	14,779	15,200	16,430
1984[2]	68,616	62,569	5,097	2,858	2,981	2,743	2,580	15,102	15,255	15,953
1985[2]	69,794	63,513	5,428	2,834	3,202	3,055	2,397	15,203	15,103	16,291
1986[2]	72,955	65,985	5,740	2,913	3,404	3,317	2,386	15,817	15,992	16,416
1987[2]	75,065	67,782	6,028	2,676	3,562	3,331	2,378	16,136	16,834	16,837
1988	78,315	70,696	6,366	2,748	3,718	3,338	2,482	16,805	17,919	17,320
1989	81,800	73,664	6,660	2,753	3,935	3,251	2,513	17,612	18,881	18,059
1990	86,704	78,006	6,821	2,927	4,044	3,471	2,646	18,156	19,976	19,965
1991	92,084	82,401	7,272	3,176	4,221	3,481	2,865	19,202	21,301	20,883
1992	98,719	88,055	7,500	3,398	4,429	3,550	2,998	20,159	22,991	23,030
1993	103,166	91,967	7,723	3,552	4,434	3,583	3,187	21,561	23,593	24,334
1994	106,373	94,796	7,766	3,794	4,416	3,547	3,326	22,524	24,157	25,266
1995	107,403	95,907	7,664	3,888	4,197	3,650	3,462	23,017	24,319	25,710
1996	109,308	97,482	7,539	3,874	4,169	4,085	3,451	23,006	24,580	26,778

Year	Engineering									Health fields
	Engineering, total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical & materials engineering	Other engineering	
1975	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976	2,025	23	234	513	297	379	122	109	348	11,062
1977	2,257	27	278	541	382	376	141	142	370	12,834
1978[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979	3,430	36	429	894	454	579	258	213	567	15,151
1980	3,854	54	465	899	558	665	316	221	666	16,258
1981	4,613	51	533	1,126	711	688	347	287	870	16,670
1982	5,247	73	672	1,241	818	765	433	308	937	16,006
1983	5,619	80	769	1,295	963	615	483	324	1,090	15,921
1984[2]	6,047	86	732	1,438	1,150	624	561	354	1,102	16,232
1985[2]	6,281	126	754	1,492	1,208	635	559	439	1,068	16,548
1986[2]	6,970	148	788	1,487	1,467	734	627	521	1,198	16,649
1987[2]	7,283	167	874	1,398	1,549	734	732	569	1,260	16,569
1988	7,619	168	792	1,565	1,682	736	835	579	1,262	17,306
1989	8,136	180	796	1,649	1,822	907	855	639	1,288	18,128
1990	8,698	199	896	1,781	1,956	908	848	692	1,418	19,402
1991	9,683	254	985	2,019	2,165	1,042	942	742	1,534	21,416
1992	10,664	263	1,097	2,328	2,426	1,175	1,086	807	1,482	23,066
1993	11,199	291	1,166	2,524	2,444	1,173	1,185	802	1,614	25,723
1994	11,577	278	1,193	2,786	2,391	1,298	1,217	840	1,574	28,328
1995	11,496	276	1,223	2,817	2,440	1,151	1,135	816	1,638	30,528
1996	11,826	283	1,315	2,854	2,548	1,091	1,190	815	1,730	31,949

[1] Master's-granting institutions were not surveyed in 1978.

[2] These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See "Technical Notes" for further information.

KEY: NA = Not available

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering.

Table 7. Full-time graduate students with U.S. citizenship in science, engineering, and health fields in all institutions, by field: 1975-96

Year	Total, science and engineering	Sciences								
		Sciences, total	Physical sciences	Earth, atmospheric, & ocean sciences	Mathematical sciences	Computer sciences	Agricultural sciences	Biological sciences	Psychology	Social sciences
1975[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1978[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1980	166,192	141,456	17,186	9,484	6,647	4,521	7,872	33,171	25,461	37,114
1981	165,662	139,618	17,049	9,439	6,511	4,887	7,873	32,490	25,566	35,803
1982	166,743	138,270	17,584	9,693	6,926	5,981	7,676	31,720	24,588	34,102
1983	169,927	138,772	18,009	10,299	6,714	6,677	7,446	31,283	25,468	32,876
1984[2]	169,916	137,969	18,292	10,164	6,772	6,982	7,420	31,374	24,924	32,041
1985[2]	168,281	136,457	18,186	9,669	6,995	8,327	6,854	30,715	24,179	31,532
1986[2]	170,447	137,217	18,264	9,382	7,243	8,912	6,743	30,663	25,085	30,925
1987[2]	171,169	137,246	18,384	8,496	7,549	8,863	6,434	30,255	26,044	31,221
1988	170,236	136,725	18,130	8,040	7,738	8,415	6,443	30,244	26,802	30,913
1989	173,420	139,351	18,107	7,717	7,697	8,616	6,393	30,367	28,021	32,433
1990	177,804	143,340	17,836	7,813	7,961	8,742	6,215	30,286	29,133	35,354
1991	185,487	148,396	18,267	7,802	8,380	8,426	6,405	31,102	30,634	37,380
1992	197,473	157,575	18,759	8,309	8,939	8,852	6,590	32,558	32,548	41,020
1993	204,484	163,261	19,231	8,680	9,056	8,985	6,661	34,520	33,196	42,932
1994	206,851	165,684	19,130	8,608	8,876	8,731	6,680	36,228	33,430	44,001
1995	204,143	165,544	18,410	8,689	8,291	8,610	6,866	37,176	33,574	43,928
1996	200,707	164,211	17,639	8,434	7,885	8,392	6,725	37,229	33,684	44,223

Year	Engineering									Health fields
	Engineering, total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical & materials engineering	Other engineering	
1975[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1978[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1980	24,736	759	2,500	4,670	5,666	2,297	3,211	1,147	4,486	21,950
1981	26,044	882	2,787	5,162	5,665	2,029	3,363	1,342	4,814	21,938
1982	28,473	945	3,267	5,428	6,421	2,190	3,767	1,297	5,158	20,586
1983	31,155	1,088	3,630	5,544	7,398	1,933	4,327	1,530	5,705	20,201
1984[2]	31,947	1,115	3,603	5,687	7,890	1,934	4,591	1,663	5,464	20,561
1985[2]	31,824	1,258	3,337	5,282	8,137	1,874	4,858	1,805	5,273	20,762
1986[2]	33,230	1,343	3,412	5,303	8,572	2,053	5,218	1,854	5,475	20,665
1987[2]	33,923	1,559	3,353	5,090	9,002	2,145	5,559	1,829	5,386	21,103
1988	33,511	1,502	2,957	5,208	9,295	2,227	5,299	1,805	5,218	21,485
1989	34,069	1,757	2,668	5,097	9,723	2,426	5,632	1,890	4,876	22,527
1990	34,464	1,870	2,668	5,375	9,652	2,374	5,781	1,985	4,759	23,875
1991	37,091	2,201	2,798	6,140	9,976	2,760	6,120	2,067	5,029	26,105
1992	39,898	2,246	2,948	7,003	10,577	3,076	6,803	2,247	4,998	28,406
1993	41,223	2,178	3,107	7,440	10,428	3,209	7,228	2,264	5,369	31,832
1994	41,167	1,862	3,370	7,848	10,467	3,180	7,090	2,335	5,015	35,448
1995	38,599	1,611	3,304	7,652	9,382	2,863	6,548	2,158	5,081	38,268
1996	36,496	1,417	3,368	7,509	8,714	2,506	6,024	1,975	4,983	40,334

[1] Distribution by citizenship data were not requested before 1980.

[2] These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See "Technical Notes" for further information.

NOTE: For 1991 and earlier years, permanent residents were included under "non-U.S. citizens". Beginning in 1992, permanent residents were included with U.S. citizens.

KEY: NA = Not available

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering.

Table 8. Full-time graduate students without U.S. citizenship in science, engineering, and health fields in all institutions, by field: 1975-96

Year	Total, science and engineering	Sciences								
		Sciences, total	Physical sciences	Earth, atmospheric, & ocean sciences	Mathematical sciences	Computer sciences	Agricultural sciences	Biological sciences	Psychology	Social sciences
1975[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1978[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1980	48,273	30,382	5,731	1,387	3,254	2,066	2,296	4,519	1,210	9,919
1981	52,341	32,660	6,258	1,495	3,641	2,558	2,439	4,787	1,004	10,478
1982	55,178	33,896	6,454	1,626	3,887	3,190	2,460	4,968	1,079	10,232
1983	59,529	36,776	7,195	1,669	4,241	3,923	2,530	5,457	1,093	10,668
1984[2]	61,099	37,879	7,560	1,570	4,537	4,454	2,488	5,740	1,045	10,485
1985[2]	65,711	41,639	8,483	1,665	4,921	5,534	2,396	6,286	1,156	11,298
1986[2]	72,379	45,443	9,498	1,867	5,145	6,108	2,598	7,146	1,170	11,911
1987[2]	76,036	48,027	10,028	1,939	5,494	6,473	2,660	7,980	1,212	12,241
1988	80,421	50,925	10,444	2,152	5,774	6,718	2,679	8,965	1,316	12,877
1989	83,486	53,180	11,100	2,304	5,984	6,990	2,677	9,981	1,327	12,817
1990	87,595	56,082	11,649	2,431	5,904	7,947	2,885	10,659	1,485	13,122
1991	91,687	57,744	11,850	2,571	5,876	8,090	2,884	11,598	1,624	13,251
1992	93,037	58,509	11,914	2,677	5,740	8,634	2,862	11,831	1,614	13,237
1993	89,546	56,972	11,380	2,687	5,474	8,389	2,807	11,961	1,586	12,688
1994	86,197	55,798	10,913	2,862	5,350	7,943	2,812	11,789	1,858	12,271
1995	83,080	53,905	10,492	2,586	5,119	7,880	2,754	11,124	1,648	12,302
1996	83,357	54,002	10,305	2,394	5,081	8,781	2,573	10,514	1,618	12,736

Year	Engineering									Health fields
	Engineering, total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical & materials engineering	Other engineering	
1975[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1976[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1977[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1978[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1979[1]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1980	17,891	568	1,990	3,288	4,297	1,439	2,630	1,107	2,572	2,033
1981	19,681	601	2,202	3,637	4,785	1,574	3,059	1,112	2,711	2,135
1982	21,282	577	2,341	3,953	5,112	1,617	3,500	1,181	3,001	2,289
1983	22,753	752	2,239	4,260	5,867	1,355	4,003	1,174	3,103	2,398
1984[2]	23,220	739	2,131	4,399	6,035	1,459	4,107	1,209	3,141	2,346
1985[2]	24,072	736	2,209	4,467	6,662	1,582	4,017	1,288	3,111	2,533
1986[2]	26,936	811	2,182	4,668	7,718	1,754	4,571	1,516	3,716	2,691
1987[2]	28,009	813	2,321	4,538	8,099	2,011	4,671	1,607	3,949	2,758
1988	29,496	1,031	2,402	4,738	8,411	2,068	5,117	1,661	4,058	3,052
1989	30,306	1,015	2,614	4,867	8,743	2,232	4,860	1,830	4,145	3,286
1990	31,513	1,140	2,775	4,753	9,023	2,396	5,086	1,945	4,395	3,556
1991	33,943	1,124	2,990	5,188	9,928	2,838	5,567	1,991	4,317	3,761
1992	34,528	1,060	2,998	5,451	10,419	3,005	5,580	2,027	3,988	3,693
1993	32,574	1,084	2,934	5,018	9,942	2,693	5,167	1,985	3,751	3,817
1994	30,399	1,138	2,735	4,793	8,945	2,730	4,785	1,773	3,500	3,633
1995	29,175	1,082	2,653	4,596	8,805	2,479	4,580	1,722	3,258	3,627
1996	29,355	1,159	2,541	4,282	9,275	2,622	4,666	1,718	3,092	3,970

[1] Distribution by citizenship data were not requested before 1980.

[2] These figures include estimated data for master's-granting institutions, which were surveyed on a sample basis from 1984 through 1987. See "Technical Notes" for further information.

NOTE: For 1991 and earlier years, permanent residents were included under "non-U.S. citizens". Beginning in 1992, permanent residents were included with U.S. citizens.

KEY: NA = Not available

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering.

Table 9. Graduate students in science, engineering, and health fields in all institutions, by detailed field: 1989-96

Field	1989	1990	1991	1992	1993	1994	1995	1996
Total, all surveyed fields	434,567	452,178	471,262	493,632	504,449	504,542	499,702	494,526
Total, science and engineering fields	382,747	397,135	412,697	430,644	435,886	431,251	422,525	415,570
Sciences, total	278,704	289,510	299,121	312,609	319,028	318,228	315,326	312,347
Physical sciences, total	33,616	34,075	34,710	35,348	35,318	34,449	33,417	32,342
Astronomy	789	810	829	869	880	973	912	874
Chemistry	18,828	19,118	19,407	19,929	20,131	19,797	19,594	19,345
Physics	13,657	13,813	14,081	14,122	13,841	13,162	12,425	11,728
Physical sciences, n.e.c.	342	334	393	428	466	517	486	395
Earth, atmos., & ocean sci., total	13,643	13,984	14,480	15,347	15,805	16,042	15,805	15,274
Atmospheric sciences	912	929	968	1,089	1,112	1,109	1,072	1,080
Geosciences	8,052	7,692	7,567	7,744	7,785	7,741	7,608	7,323
Oceanography	2,207	2,333	2,386	2,530	2,611	2,853	2,703	2,598
Earth, atmos., & ocean sci., n.e.c.	2,472	3,030	3,559	3,984	4,297	4,339	4,422	4,273
Mathematical sciences, total	19,247	19,774	19,952	20,355	20,000	19,579	18,509	18,015
Mathematics & applied mathematics	16,723	17,096	17,206	17,404	16,945	16,463	15,400	14,970
Statistics	2,524	2,678	2,746	2,951	3,055	3,116	3,109	3,045
Computer sciences	32,482	34,257	34,610	36,293	36,189	34,128	33,432	34,592
Agricultural sciences	11,190	11,316	11,506	11,827	11,914	12,199	12,367	11,914
Biological sciences, total	48,852	49,989	51,778	54,177	56,452	58,143	58,706	58,127
Anatomy	1,078	1,000	1,051	1,030	1,027	1,079	1,056	1,111
Biochemistry	5,082	5,039	5,201	5,376	5,513	5,632	5,520	5,265
Biology	12,761	13,027	13,292	13,874	14,327	14,220	14,284	14,635
Biometry/epidemiology	1,722	1,871	2,032	2,365	2,658	2,710	2,812	3,001
Biophysics	655	642	697	751	780	794	845	833
Botany	2,826	2,733	2,694	2,689	2,714	2,748	2,609	2,504
Cell biology	2,234	2,555	2,809	3,093	3,374	3,768	3,890	3,826
Ecology	1,084	1,136	1,180	1,301	1,410	1,566	1,680	1,615
Entomology/parasitology	1,181	1,173	1,171	1,193	1,247	1,263	1,241	1,234
Genetics	1,365	1,408	1,520	1,639	1,785	1,699	1,700	1,729
Microbio., immunology, & virology	4,827	4,873	4,928	4,972	5,068	5,141	5,072	4,963
Nutrition	4,164	4,172	4,164	4,159	4,388	4,747	5,016	4,859
Pathology	1,369	1,354	1,449	1,456	1,575	1,707	1,670	1,656
Pharmacology	2,267	2,353	2,432	2,529	2,645	2,830	2,700	2,652
Physiology	2,206	2,236	2,332	2,317	2,372	2,378	2,540	2,377
Zoology	2,083	2,104	2,191	2,139	2,120	2,092	2,068	1,910
Biosciences, n.e.c.	1,948	2,313	2,635	3,294	3,449	3,769	4,003	3,887
Psychology, total	45,528	48,167	51,343	53,484	54,557	54,554	53,641	53,353
Psychology, general	19,408	20,108	19,555	18,819	18,916	18,329	17,688	16,917
Clinical psychology	9,298	9,916	10,834	12,073	12,497	12,652	12,497	12,761
Psychology, n.e.c.	16,822	18,143	20,954	22,592	23,144	23,573	23,456	23,675
Social sciences, total	74,146	77,948	80,742	85,778	88,793	89,134	89,449	88,730
Agricultural economics	2,276	2,273	2,364	2,522	2,415	2,289	2,338	2,117
Anthropology (cultural & social)	6,128	6,479	6,731	7,123	7,361	7,665	7,693	7,767
Economics (except agricultural)	12,139	12,326	12,707	13,252	13,214	12,913	12,673	12,080
Geography	3,479	3,530	3,760	4,102	4,378	4,502	4,371	4,331
History and philosophy of science	304	331	337	360	369	387	401	409
Linguistics	3,286	3,404	3,425	3,277	3,321	3,279	3,194	3,156
Political science	29,194	30,582	31,707	33,797	35,076	34,317	34,298	33,342
Sociology	7,405	7,801	8,393	9,011	9,425	9,498	9,564	9,428
Sociology/anthropology	988	1,164	899	979	935	987	941	923
Social sciences, n.e.c.	8,947	10,058	10,419	11,355	12,299	13,297	13,976	15,177
Engineering, total	104,043	107,625	113,576	118,035	116,858	113,023	107,199	103,223
Aerospace engineering	3,524	3,934	4,120	4,036	3,940	3,715	3,343	3,208
Agricultural engineering	1,043	946	983	1,008	1,018	1,061	1,037	1,012
Biomedical engineering	1,916	2,136	2,239	2,537	2,675	2,750	2,732	2,732
Chemical engineering	6,460	6,735	7,127	7,397	7,516	7,608	7,424	7,373
Civil engineering	14,909	15,542	17,398	19,572	19,583	19,925	19,218	18,528
Electrical engineering	33,257	33,722	35,182	36,460	35,314	33,050	30,747	29,736
Engineering science	2,077	2,020	2,154	2,218	2,180	2,089	1,955	1,751
Industrial/manufacturing eng.	11,094	11,248	12,676	13,525	13,596	13,661	13,143	12,399
Mechanical engineering	16,265	16,879	17,730	18,637	18,477	17,761	16,363	15,509
Metallurgical/materials eng.	4,594	4,941	5,160	5,512	5,363	5,191	4,920	4,713
Mining engineering	418	437	489	437	427	424	373	371
Nuclear engineering	1,323	1,278	1,282	1,286	1,306	1,246	1,154	980
Petroleum engineering	665	670	705	737	725	624	610	562
Engineering, n.e.c.	6,498	7,137	6,331	4,673	4,738	3,918	4,180	4,349

See explanatory information, if any, and SOURCE at end of table.

Table 9. Graduate students in science, engineering, and health fields in all institutions, by detailed field: 1989-96

Field	1989	1990	1991	1992	1993	1994	1995	1996
Total, health fields	51,820	55,043	58,565	62,988	68,563	73,291	77,177	78,956
Medical fields, total	10,232	10,950	11,707	12,594	14,184	15,027	15,521	15,341
Anesthesiology	355	391	529	708	719	729	749	754
Cardiology	0	0	2	8	11	14	19	18
Oncology/cancer research	104	113	156	197	209	208	189	185
Endocrinology	82	74	66	71	63	63	53	46
Gastroenterology	0	1	0	0	1	0	0	0
Hematology	4	4	4	5	3	2	1	3
Neurology	744	844	1,003	1,149	1,311	1,455	1,554	1,632
Obstetrics and gynecology	7	5	10	3	3	4	6	4
Ophthalmology	43	37	32	27	19	32	30	33
Otorhinolaryngology	9	4	3	0	1	2	0	0
Pediatrics	136	140	153	154	196	261	238	275
Preventive medicine/community health	7,622	8,167	8,423	8,737	9,976	10,459	10,858	10,564
Psychiatry	111	122	104	147	172	225	249	218
Pulmonary disease	2	0	0	0	0	0	0	0
Radiology	192	196	233	252	287	320	314	285
Surgery	72	65	69	76	82	119	174	167
Clinical medicine, n.e.c.	749	787	920	1,060	1,131	1,134	1,087	1,157
Other health fields, total	41,588	44,093	46,858	50,394	54,379	58,264	61,656	63,615
Dental sciences	1,004	956	1,016	1,121	1,135	1,199	1,251	1,291
Nursing	19,689	21,194	22,012	23,213	24,781	26,997	28,405	27,467
Pharmaceutical sciences	2,787	2,889	2,968	2,804	2,871	2,901	2,948	2,975
Speech pathology/audiology	7,911	8,354	8,945	9,791	10,740	11,473	12,092	12,973
Veterinary sciences	801	900	894	942	877	875	929	946
Health related, n.e.c.	9,396	9,800	11,023	12,523	13,975	14,819	16,031	17,963

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 10. Male graduate students in science, engineering, and health fields in all institutions, by detailed field: 1989-96

Field	1989	1990	1991	1992	1993	1994	1995	1996
Total, all surveyed fields	268,733	275,678	284,898	294,234	294,502	288,373	279,392	271,857
Total, science and engineering fields	256,849	263,394	271,845	280,397	279,289	272,120	262,327	253,738
Sciences, total	166,406	170,441	173,984	179,595	180,123	177,146	173,142	168,767
Physical sciences, total	25,815	26,007	26,146	26,504	26,116	25,290	24,327	23,294
Astronomy	649	645	657	683	682	750	689	647
Chemistry	13,158	13,250	13,145	13,367	13,279	12,956	12,759	12,502
Physics	11,789	11,900	12,101	12,179	11,865	11,254	10,590	9,919
Physical sciences, n.e.c.	219	212	243	275	290	330	289	226
Earth, atmos., & ocean sci., total	9,785	9,865	10,025	10,489	10,745	10,689	10,336	9,760
Atmospheric sciences	734	744	778	848	887	867	835	844
Geosciences	6,089	5,770	5,559	5,667	5,675	5,506	5,310	4,973
Oceanography	1,482	1,552	1,540	1,571	1,607	1,746	1,609	1,539
Earth, atmos., & ocean sci., n.e.c.	1,480	1,799	2,148	2,403	2,576	2,570	2,582	2,404
Mathematical sciences	13,262	13,575	13,654	13,806	13,362	13,044	12,248	11,794
Computer sciences	24,494	26,058	26,340	27,838	27,767	26,043	25,306	25,802
Agricultural sciences	8,045	7,981	7,939	8,059	7,826	7,911	7,935	7,502
Biological sciences, total	26,618	26,947	27,643	28,702	29,399	29,988	29,876	29,360
Anatomy	598	542	550	537	534	554	549	586
Biochemistry	3,064	2,974	3,070	3,158	3,182	3,250	3,129	2,982
Biology	7,009	7,078	7,080	7,295	7,520	7,476	7,395	7,511
Biometry/epidemiology	738	874	920	1,037	1,132	1,124	1,139	1,227
Biophysics	493	478	515	549	554	576	604	589
Botany	1,743	1,661	1,627	1,635	1,620	1,584	1,465	1,394
Cell biology	1,290	1,435	1,528	1,687	1,802	2,038	2,097	2,071
Ecology	644	667	662	712	746	821	906	847
Entomology/parasitology	817	815	830	839	847	846	827	810
Genetics	675	681	761	797	853	787	818	828
Microbio., immunology, & virology	2,588	2,553	2,576	2,606	2,600	2,632	2,591	2,506
Nutrition	1,197	1,231	1,244	1,208	1,244	1,267	1,287	1,231
Pathology	793	776	825	809	834	925	890	847
Pharmacology	1,298	1,329	1,302	1,348	1,404	1,484	1,395	1,366
Physiology	1,313	1,303	1,366	1,366	1,389	1,392	1,482	1,396
Zoology	1,291	1,269	1,307	1,311	1,260	1,216	1,202	1,091
Biosciences, n.e.c.	1,067	1,281	1,480	1,808	1,878	2,016	2,100	2,078
Psychology	15,673	15,822	16,556	16,650	16,567	16,416	15,877	15,460
Social sciences, total	42,714	44,186	45,681	47,547	48,341	47,765	47,237	45,795
Agricultural economics	1,694	1,674	1,728	1,810	1,665	1,541	1,555	1,407
Anthropology (cultural & social)	2,548	2,688	2,778	2,876	2,969	3,072	3,140	3,120
Economics (except agricultural)	8,897	8,952	9,148	9,450	9,358	9,120	8,797	8,297
Geography	2,295	2,326	2,442	2,671	2,796	2,904	2,786	2,770
Linguistics	1,334	1,398	1,512	1,281	1,301	1,213	1,194	1,133
Political science	17,024	17,425	17,971	18,826	19,320	18,733	18,348	17,675
Sociology	3,395	3,522	3,781	3,861	3,857	3,758	3,781	3,643
Sociology/anthropology	433	483	410	445	423	396	387	382
Social sciences, other	5,094	5,718	5,911	6,327	6,652	7,028	7,249	7,368
Engineering, total	90,443	92,953	97,861	100,802	99,166	94,974	89,185	84,971
Aerospace engineering	3,281	3,645	3,793	3,688	3,583	3,357	2,992	2,856
Agricultural engineering	956	845	858	864	867	861	835	802
Biomedical engineering	1,442	1,589	1,651	1,920	1,977	2,053	2,006	1,999
Chemical engineering	5,431	5,589	5,870	6,003	6,017	6,082	5,863	5,731
Civil engineering	12,474	12,853	14,296	15,918	15,725	15,714	14,986	14,228
Electrical engineering	29,742	30,007	31,311	32,167	30,992	28,946	26,652	25,607
Engineering science	1,829	1,721	1,866	1,913	1,876	1,783	1,658	1,456
Industrial/manufacturing eng.	8,984	9,111	10,321	10,870	11,003	10,866	10,388	9,685
Mechanical engineering	14,867	15,437	16,219	16,939	16,703	15,938	14,686	13,873
Metallurgical/materials eng.	3,784	4,048	4,173	4,443	4,336	4,122	3,861	3,653
Nuclear engineering	1,182	1,123	1,105	1,100	1,121	1,093	1,009	827
Engineering, other	6,471	6,985	6,398	4,977	4,966	4,159	4,249	4,254
Total, health fields	11,884	12,284	13,053	13,837	15,213	16,253	17,065	18,119
Clinical fields	955	1,017	1,150	1,289	1,353	1,373	1,348	1,407
Dental sciences	713	677	717	772	786	819	819	831
Nursing	1,036	1,017	1,128	1,168	1,285	1,506	1,661	1,771
Pharmaceutical sciences	1,649	1,748	1,729	1,621	1,592	1,591	1,602	1,564
Preventive medicine/community health	2,869	3,174	3,265	3,334	3,892	4,108	4,198	4,253
Speech pathology/audiology	719	736	708	777	856	935	983	1,042
Veterinary sciences	470	512	528	536	470	467	490	505
Other health fields	3,473	3,403	3,828	4,340	4,979	5,454	5,964	6,746

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 11. Female graduate students in science, engineering, and health fields in all institutions, by detailed field: 1989-96

Field	1989	1990	1991	1992	1993	1994	1995	1996
Total, all surveyed fields	165,834	176,500	186,364	199,398	209,947	216,169	220,310	222,669
Total, science and engineering fields	125,898	133,741	140,852	150,247	156,597	159,131	160,198	161,832
Sciences, total	112,298	119,069	125,137	133,014	138,905	141,082	142,184	143,580
Physical sciences, total	7,801	8,068	8,564	8,844	9,202	9,159	9,090	9,048
Astronomy	140	165	172	186	198	223	223	227
Chemistry	5,670	5,868	6,262	6,562	6,852	6,841	6,835	6,843
Physics	1,868	1,913	1,980	1,943	1,976	1,908	1,835	1,809
Physical sciences, n.e.c.	123	122	150	153	176	187	197	169
Earth, atmos., & ocean sci., total	3,858	4,119	4,455	4,858	5,060	5,353	5,469	5,514
Atmospheric sciences	178	185	190	241	225	242	237	236
Geosciences	1,963	1,922	2,008	2,077	2,110	2,235	2,298	2,350
Oceanography	725	781	846	959	1,004	1,107	1,094	1,059
Earth, atmos., & ocean sci., n.e.c.	992	1,231	1,411	1,581	1,721	1,769	1,840	1,869
Mathematical sciences	5,985	6,199	6,298	6,549	6,638	6,535	6,261	6,221
Computer sciences	7,988	8,199	8,270	8,455	8,422	8,085	8,126	8,790
Agricultural sciences	3,145	3,335	3,567	3,768	4,088	4,288	4,432	4,412
Biological sciences, total	22,234	23,042	24,135	25,475	27,053	28,155	28,830	28,767
Anatomy	480	458	501	493	493	525	507	525
Biochemistry	2,018	2,065	2,131	2,218	2,331	2,382	2,391	2,283
Biology	5,752	5,949	6,212	6,579	6,807	6,744	6,889	7,124
Biometry/epidemiology	984	997	1,112	1,328	1,526	1,586	1,673	1,774
Biophysics	162	164	182	202	226	218	241	244
Botany	1,083	1,072	1,067	1,054	1,094	1,164	1,144	1,110
Cell biology	944	1,120	1,281	1,406	1,572	1,730	1,793	1,825
Ecology	440	469	518	589	664	745	774	768
Entomology/parasitology	364	358	341	354	400	417	414	424
Genetics	690	727	759	842	932	912	882	901
Microbio., immunology, & virology	2,239	2,320	2,352	2,366	2,468	2,509	2,481	2,457
Nutrition	2,967	2,941	2,920	2,951	3,144	3,480	3,729	3,628
Pathology	576	578	624	647	741	782	780	809
Pharmacology	969	1,024	1,130	1,181	1,241	1,346	1,305	1,286
Physiology	893	933	966	951	983	986	1,058	981
Zoology	792	835	884	828	860	876	866	819
Biosciences, n.e.c.	881	1,032	1,155	1,486	1,571	1,753	1,903	1,809
Psychology	29,855	32,345	34,787	36,834	37,990	38,138	37,764	37,893
Social sciences, total	31,432	33,762	35,061	38,231	40,452	41,369	42,212	42,935
Agricultural economics	582	599	636	712	750	748	783	710
Anthropology (cultural & social)	3,580	3,791	3,953	4,247	4,392	4,593	4,553	4,647
Economics (except agricultural)	3,242	3,374	3,559	3,802	3,856	3,793	3,876	3,783
Geography	1,184	1,204	1,318	1,431	1,582	1,598	1,585	1,561
Linguistics	1,952	2,006	1,913	1,996	2,020	2,066	2,000	2,023
Political science	12,170	13,157	13,736	14,971	15,756	15,584	15,950	15,667
Sociology	4,010	4,279	4,612	5,150	5,568	5,740	5,783	5,785
Sociology/anthropology	555	681	489	534	512	591	554	541
Social sciences, other	4,157	4,671	4,845	5,388	6,016	6,656	7,128	8,218
Engineering, total	13,600	14,672	15,715	17,233	17,692	18,049	18,014	18,252
Aerospace engineering	243	289	327	348	357	358	351	352
Agricultural engineering	87	101	125	144	151	200	202	210
Biomedical engineering	474	547	588	617	698	697	726	733
Chemical engineering	1,029	1,146	1,257	1,394	1,499	1,526	1,561	1,642
Civil engineering	2,435	2,689	3,102	3,654	3,858	4,211	4,232	4,300
Electrical engineering	3,515	3,715	3,871	4,293	4,322	4,104	4,095	4,129
Engineering science	248	299	288	305	304	306	297	295
Industrial/manufacturing eng.	2,110	2,137	2,355	2,655	2,593	2,795	2,755	2,714
Mechanical engineering	1,398	1,442	1,511	1,698	1,774	1,823	1,677	1,636
Metallurgical/materials eng.	810	893	987	1,069	1,027	1,069	1,059	1,060
Nuclear engineering	141	155	177	186	185	153	145	153
Engineering, other	1,110	1,259	1,127	870	924	807	914	1,028
Total, health fields	39,936	42,759	45,512	49,151	53,350	57,038	60,112	60,837
Clinical fields	911	922	1,131	1,419	1,544	1,740	1,761	1,738
Dental sciences	291	279	299	349	349	380	432	460
Nursing	18,653	20,177	20,884	22,045	23,496	25,491	26,744	25,696
Pharmaceutical sciences	1,138	1,141	1,239	1,183	1,279	1,310	1,346	1,411
Preventive medicine/community health	4,753	4,993	5,158	5,403	6,084	6,351	6,660	6,311
Speech pathology/audiology	7,192	7,618	8,237	9,014	9,884	10,538	11,109	11,931
Veterinary sciences	331	388	366	406	407	408	439	441
Other health fields	6,667	7,241	8,198	9,332	10,307	10,820	11,621	12,849

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 12. Graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and racial/ethnic background of U.S. citizens: 1989-96

Field, citizenship, and racial/ethnic background	1989	1990	1991	1992	1993	1994	1995	1996
Total, all surveyed fields	434,567	452,178	471,262	493,632	504,449	504,542	499,702	494,526
Total U.S. citizens	332,588	345,108	358,073	379,704	394,115	397,984	396,818	391,552
Black, non-Hispanic	14,034	15,216	16,407	18,487	20,439	21,177	22,154	22,996
American Indian/Alaskan Native	1,068	1,270	1,365	1,515	1,606	1,725	1,857	1,910
Asian/Pacific Islander	17,109	18,801	20,059	23,966	26,849	29,616	29,359	29,983
Hispanic	11,206	12,014	13,053	14,625	16,052	15,967	17,264	17,851
White, non-Hispanic	269,752	281,558	288,813	302,169	309,257	311,987	304,420	297,331
Other or unknown	19,419	16,249	18,376	18,942	19,912	17,512	21,764	21,481
Non-U.S. citizens	101,979	107,070	113,189	113,928	110,334	106,558	102,884	102,974
Total, science and engineering	382,747	397,135	412,697	430,644	435,886	431,251	422,525	415,570
Total U.S. citizens	284,667	294,318	304,063	321,182	330,169	329,095	323,997	317,433
Black, non-Hispanic	11,775	12,774	13,691	15,445	17,118	17,611	18,283	19,084
American Indian/Alaskan Native	860	1,054	1,120	1,243	1,309	1,383	1,516	1,541
Asian/Pacific Islander	14,692	17,155	18,136	21,752	24,059	26,474	25,899	25,976
Hispanic	9,436	10,159	11,045	12,246	13,381	13,281	14,117	14,653
White, non-Hispanic	229,676	238,472	243,602	253,435	256,859	255,719	245,871	238,198
Other or unknown	17,228	14,704	16,469	17,061	17,443	14,627	18,311	17,981
Non-U.S. citizens	98,080	102,817	108,634	109,462	105,717	102,156	98,528	98,137
Sciences, total	278,704	289,510	299,121	312,609	319,028	318,228	315,326	312,347
Total U.S. citizens	217,321	224,892	231,830	244,587	252,578	253,056	252,265	249,260
Black, non-Hispanic	10,159	10,988	11,666	13,071	14,559	14,827	15,427	16,190
American Indian/Alaskan Native	738	902	935	1,066	1,098	1,141	1,285	1,307
Asian/Pacific Islander	9,681	10,468	11,020	13,260	15,072	16,697	16,991	17,526
Hispanic	7,729	8,273	8,921	9,783	10,687	10,420	11,309	11,718
White, non-Hispanic	178,183	185,265	188,818	196,039	199,419	199,699	193,915	189,119
Other or unknown	10,831	8,996	10,470	11,368	11,743	10,272	13,438	13,400
Non-U.S. citizens	61,383	64,618	67,291	68,022	66,450	65,172	63,061	63,087
Physical sciences	33,616	34,075	34,710	35,348	35,318	34,449	33,417	32,342
Total U.S. citizens	21,843	21,609	21,985	22,543	23,066	22,740	21,992	21,158
Black, non-Hispanic	633	654	699	807	843	856	897	986
American Indian/Alaskan Native	44	63	62	67	81	67	76	60
Asian/Pacific Islander	1,175	1,200	1,429	1,615	1,973	1,923	1,780	1,742
Hispanic	680	642	649	680	747	675	732	743
White, non-Hispanic	18,318	18,433	18,402	18,527	18,582	18,422	17,487	16,741
Other or unknown	993	617	744	847	840	797	1,020	886
Non-U.S. citizens	11,773	12,466	12,725	12,805	12,252	11,709	11,425	11,184
Earth, atmospheric, & ocean sciences	13,643	13,984	14,480	15,347	15,805	16,042	15,805	15,274
Total U.S. citizens	11,068	11,309	11,583	12,343	12,795	12,776	12,858	12,509
Black, non-Hispanic	95	123	141	202	227	203	219	223
American Indian/Alaskan Native	26	30	29	35	46	49	53	65
Asian/Pacific Islander	207	258	267	383	469	454	425	411
Hispanic	209	241	250	308	371	344	366	382
White, non-Hispanic	10,137	10,375	10,531	10,893	11,145	11,351	11,322	10,950
Other or unknown	394	282	365	522	537	375	473	478
Non-U.S. citizens	2,575	2,675	2,897	3,004	3,010	3,266	2,947	2,765
Mathematical sciences	19,247	19,774	19,952	20,355	20,000	19,579	18,509	18,015
Total U.S. citizens	12,564	13,210	13,318	13,878	13,866	13,516	12,700	12,254
Black, non-Hispanic	463	511	524	579	710	673	689	711
American Indian/Alaskan Native	34	20	20	27	32	36	70	41
Asian/Pacific Islander	703	822	866	963	1,020	1,208	1,121	1,225
Hispanic	305	351	349	376	415	369	400	425
White, non-Hispanic	10,064	10,605	10,457	10,851	10,572	10,496	9,659	9,201
Other or unknown	995	901	1,102	1,082	1,117	734	761	651
Non-U.S. citizens	6,683	6,564	6,634	6,477	6,134	6,063	5,809	5,761
Computer sciences	32,482	34,257	34,610	36,293	36,189	34,128	33,432	34,592
Total U.S. citizens	22,788	23,351	22,988	24,163	24,269	23,064	22,638	22,755
Black, non-Hispanic	848	985	1,093	1,108	1,168	1,182	1,155	1,278
American Indian/Alaskan Native	40	44	42	72	68	43	55	53
Asian/Pacific Islander	2,727	2,888	2,858	3,399	3,566	4,056	4,053	4,277
Hispanic	542	565	631	706	696	633	664	701
White, non-Hispanic	16,496	17,292	16,464	16,893	16,760	15,709	14,739	14,443
Other or unknown	2,135	1,577	1,900	1,985	2,011	1,441	1,972	2,003
Non-U.S. citizens	9,694	10,906	11,622	12,130	11,920	11,064	10,794	11,837

See explanatory information, if any, and SOURCE at end of table.

Table 12. Graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and racial/ethnic background of U.S. citizens: 1989-96

Field, citizenship, and racial/ethnic background	1989	1990	1991	1992	1993	1994	1995	1996
Agricultural sciences	11,190	11,316	11,506	11,827	11,914	12,199	12,367	11,914
Total U.S. citizens	8,251	8,133	8,298	8,649	8,778	9,060	9,270	8,966
Black, non-Hispanic	153	158	145	209	235	239	294	268
American Indian/Alaskan Native	25	20	31	39	34	37	59	49
Asian/Pacific Islander	236	242	225	215	264	276	274	281
Hispanic	297	272	279	279	308	263	288	367
White, non-Hispanic	7,294	7,251	7,481	7,679	7,731	7,972	7,978	7,732
Other or unknown	246	190	137	228	206	273	377	269
Non-U.S. citizens	2,939	3,183	3,208	3,178	3,136	3,139	3,097	2,948
Biological sciences	48,852	49,989	51,778	54,177	56,452	58,143	55,706	58,127
Total U.S. citizens	38,080	38,470	39,282	41,358	43,525	45,314	46,508	46,639
Black, non-Hispanic	1,212	1,249	1,317	1,493	1,737	1,709	1,879	2,010
American Indian/Alaskan Native	85	142	129	141	157	183	205	200
Asian/Pacific Islander	1,986	2,228	2,346	2,822	3,456	3,953	4,297	4,465
Hispanic	1,200	1,220	1,374	1,459	1,649	1,651	1,823	1,847
White, non-Hispanic	32,361	32,677	33,058	34,229	35,094	36,389	36,491	36,327
Other or unknown	1,236	954	1,058	1,214	1,432	1,429	1,813	1,790
Non-U.S. citizens	10,772	11,519	12,496	12,819	12,927	12,829	12,198	11,488
Psychology	45,528	48,167	51,343	53,484	54,557	54,554	53,641	53,353
Total U.S. citizens	43,897	46,349	49,355	51,551	52,676	52,211	51,554	51,374
Black, non-Hispanic	2,061	2,226	2,455	2,758	3,284	3,529	3,359	3,460
American Indian/Alaskan Native	180	235	252	290	289	317	330	363
Asian/Pacific Islander	817	962	1,040	1,278	1,470	1,583	1,598	1,785
Hispanic	1,751	2,160	2,365	2,371	2,562	2,485	2,799	3,009
White, non-Hispanic	37,227	39,246	40,990	42,426	42,662	42,062	40,146	39,427
Other or unknown	1,861	1,520	2,253	2,428	2,409	2,235	3,322	3,330
Non-U.S. citizens	1,631	1,818	1,988	1,933	1,881	2,343	2,087	1,979
Social sciences	74,146	77,948	80,742	85,778	88,793	89,134	89,449	88,730
Total U.S. citizens	58,830	62,461	65,021	70,102	73,603	74,375	74,745	73,605
Black, non-Hispanic	4,694	5,082	5,292	5,915	6,355	6,436	6,935	7,254
American Indian/Alaskan Native	304	348	370	395	391	409	437	476
Asian/Pacific Islander	1,830	1,868	1,989	2,585	2,854	3,244	3,343	3,340
Hispanic	2,745	2,822	3,024	3,604	3,739	4,000	4,237	4,244
White, non-Hispanic	46,286	49,386	51,435	54,541	56,873	57,298	56,093	54,298
Other or unknown	2,971	2,955	2,911	3,062	3,191	2,988	3,700	3,993
Non-U.S. citizens	15,316	15,487	15,721	15,676	15,190	14,759	14,704	15,125
Engineering, total	104,043	107,625	113,576	118,035	116,858	113,023	107,199	103,223
Total U.S. citizens	67,346	69,426	72,233	76,595	77,591	76,039	71,732	68,173
Black, non-Hispanic	1,616	1,786	2,025	2,374	2,559	2,784	2,856	2,894
American Indian/Alaskan Native	122	152	185	177	211	242	231	234
Asian/Pacific Islander	6,011	6,687	7,116	8,492	8,987	9,777	9,008	8,450
Hispanic	1,707	1,886	2,124	2,463	2,694	2,861	2,808	2,935
White, non-Hispanic	51,493	53,207	54,784	57,396	57,440	56,020	51,956	49,079
Other or unknown	6,397	5,708	5,999	5,693	5,700	4,355	4,873	4,581
Non-U.S. citizens	36,697	38,199	41,343	41,440	39,267	36,984	35,467	35,050
Chemical engineering	6,460	6,735	7,127	7,397	7,516	7,608	7,424	7,373
Total U.S. citizens	3,662	3,791	3,939	4,122	4,348	4,601	4,473	4,505
Black, non-Hispanic	79	84	119	144	159	157	174	189
American Indian/Alaskan Native	10	5	22	15	14	18	21	30
Asian/Pacific Islander	235	316	399	379	461	524	458	482
Hispanic	111	143	159	176	180	171	202	200
White, non-Hispanic	3,097	3,151	3,140	3,236	3,388	3,521	3,420	3,381
Other or unknown	130	92	100	172	146	210	198	223
Non-U.S. citizens	2,798	2,944	3,188	3,275	3,168	3,007	2,951	2,868
Civil engineering	14,909	15,542	17,398	19,572	19,583	19,925	19,218	18,528
Total U.S. citizens	9,074	9,628	10,854	12,734	13,299	13,967	13,559	13,263
Black, non-Hispanic	244	232	279	343	393	424	471	491
American Indian/Alaskan Native	22	37	34	31	43	38	42	48
Asian/Pacific Islander	597	760	837	1,043	1,167	1,339	1,322	1,254
Hispanic	275	302	383	478	550	551	593	712
White, non-Hispanic	7,337	7,727	8,684	10,196	10,415	11,029	10,434	9,983
Other or unknown	599	570	637	643	731	586	697	775
Non-U.S. citizens	5,835	5,914	6,544	6,838	6,284	5,958	5,659	5,265

See explanatory information, if any, and SOURCE at end of table.

Table 12. Graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and racial/ethnic background of U.S. citizens: 1989-96

Field, citizenship, and racial/ethnic background	1989	1990	1991	1992	1993	1994	1995	1996
Electrical engineering	33,257	33,722	35,182	36,460	35,314	33,050	30,747	29,736
Total U.S. citizens	22,109	22,127	22,366	23,627	22,874	21,644	19,529	18,374
Black, non-Hispanic	564	612	669	771	863	861	821	775
American Indian/Alaskan Native	37	49	39	38	45	53	52	51
Asian/Pacific Islander	2,703	3,050	3,026	3,755	3,737	4,088	3,697	3,540
Hispanic	558	576	661	748	841	853	784	792
White, non-Hispanic	15,818	15,662	15,571	15,996	15,650	14,336	12,640	11,769
Other or unknown	2,429	2,178	2,400	2,319	1,738	1,453	1,535	1,447
Non-U.S. citizens	11,148	11,595	12,816	12,833	12,440	11,406	11,218	11,362
Industrial engineering	11,094	11,248	12,676	13,525	13,596	13,661	13,143	12,399
Total U.S. citizens	8,176	8,129	8,902	9,682	10,153	10,095	9,819	9,067
Black, non-Hispanic	253	294	384	444	440	507	527	520
American Indian/Alaskan Native	15	23	39	42	36	23	23	21
Asian/Pacific Islander	451	450	586	794	863	852	837	736
Hispanic	241	231	253	297	332	375	374	410
White, non-Hispanic	6,537	6,407	7,016	7,375	7,448	7,483	7,025	6,643
Other or unknown	679	724	624	730	1,034	855	1,033	737
Non-U.S. citizens	2,918	3,119	3,774	3,843	3,443	3,566	3,324	3,332
Mechanical engineering	16,265	16,879	17,730	18,637	18,477	17,761	16,363	15,509
Total U.S. citizens	10,450	10,799	11,056	11,875	12,199	11,940	10,905	10,026
Black, non-Hispanic	200	247	246	320	336	398	403	417
American Indian/Alaskan Native	13	15	21	24	30	54	44	35
Asian/Pacific Islander	824	830	985	1,179	1,307	1,421	1,225	1,073
Hispanic	214	282	338	394	382	453	422	383
White, non-Hispanic	7,633	8,238	8,416	9,035	9,029	8,893	8,059	7,461
Other or unknown	1,566	1,187	1,050	923	1,115	721	752	657
Non-U.S. citizens	5,815	6,080	6,674	6,762	6,278	5,821	5,458	5,483
Other engineering	22,058	23,499	23,463	22,444	22,372	21,018	20,304	19,678
Total U.S. citizens	13,875	14,952	15,116	14,555	14,718	13,792	13,447	12,938
Black, non-Hispanic	276	317	328	352	368	437	460	502
American Indian/Alaskan Native	25	23	30	27	43	56	49	49
Asian/Pacific Islander	1,201	1,281	1,283	1,342	1,452	1,553	1,469	1,365
Hispanic	308	352	330	370	409	458	433	438
White, non-Hispanic	11,071	12,022	11,957	11,558	11,510	10,758	10,378	9,842
Other or unknown	994	957	1,188	906	936	530	658	742
Non-U.S. citizens	8,183	8,547	8,347	7,889	7,654	7,226	6,857	6,740
Total, health fields	51,820	55,043	58,565	62,988	68,563	73,291	77,177	78,956
Total U.S. citizens	47,921	50,790	54,010	58,522	63,946	68,889	72,821	74,119
Black, non-Hispanic	2,259	2,442	2,716	3,042	3,321	3,566	3,871	3,912
American Indian/Alaskan Native	208	216	245	272	297	342	341	369
Asian/Pacific Islander	1,417	1,646	1,923	2,214	2,790	3,142	3,460	4,007
Hispanic	1,770	1,855	2,008	2,379	2,671	2,686	3,147	3,198
White, non-Hispanic	40,076	43,086	45,211	48,734	52,398	56,268	58,549	59,133
Other or unknown	2,191	1,545	1,907	1,881	2,469	2,885	3,453	3,500
Non-U.S. citizens	3,899	4,253	4,555	4,466	4,617	4,402	4,356	4,837

NOTE: For 1991 and earlier years, permanent residents were included under "non-U.S. citizens". Beginning in 1992, permanent residents were included with U.S. citizens.

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering.

Table 13. Graduate students in science, engineering, and health fields in all institutions, by sex, field, and citizenship, and by racial/ethnic background of U.S. citizens: 1994-96

Sex, field, and year	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
	Total enrollment							
Total, all surveyed fields:								
1994	504,542	21,177	1,725	29,616	15,967	311,987	17,512	106,558
1995	499,702	22,154	1,857	29,359	17,264	304,420	21,764	102,884
1996	494,526	22,996	1,910	29,983	17,851	297,331	21,481	102,974
Total, science and engineering fields:								
1994	431,251	17,611	1,383	26,474	13,281	255,719	14,627	102,156
1995	422,525	18,283	1,516	25,899	14,117	245,871	18,311	98,528
1996	415,570	19,084	1,541	25,976	14,653	238,198	17,981	98,137
Sciences, total:								
1994	318,228	14,827	1,141	16,697	10,420	199,699	10,272	65,172
1995	315,326	15,427	1,285	16,891	11,309	193,915	13,438	63,061
1996	312,347	16,190	1,307	17,526	11,718	189,119	13,400	63,087
Physical sciences:								
1994	34,449	856	67	1,923	675	18,422	797	11,709
1995	33,417	897	76	1,780	732	17,487	1,020	11,425
1996	32,342	986	60	1,742	743	16,741	886	11,184
Earth, atmospheric, & ocean sciences:								
1994	16,042	203	49	454	344	11,351	375	3,266
1995	15,805	219	53	425	366	11,322	473	2,947
1996	15,274	223	65	411	382	10,950	478	2,765
Mathematical sciences:								
1994	19,579	673	36	1,208	369	10,496	734	6,063
1995	18,509	689	70	1,121	400	9,659	761	5,809
1996	18,015	711	41	1,225	425	9,201	651	5,761
Computer sciences:								
1994	34,128	1,182	43	4,056	633	15,709	1,441	11,064
1995	33,432	1,155	55	4,053	664	14,739	1,972	10,794
1996	34,592	1,278	53	4,277	701	14,443	2,003	11,837
Agricultural sciences:								
1994	12,199	239	37	276	263	7,972	273	3,139
1995	12,367	294	59	274	288	7,978	377	3,097
1996	11,914	268	49	281	367	7,732	269	2,948
Biological sciences:								
1994	58,143	1,709	183	3,953	1,651	36,389	1,429	12,829
1995	58,706	1,879	205	4,297	1,823	36,491	1,813	12,198
1996	58,127	2,010	200	4,465	1,847	36,327	1,790	11,488
Psychology:								
1994	54,554	3,529	317	1,583	2,485	42,062	2,235	2,343
1995	53,641	3,359	330	1,598	2,799	40,146	3,322	2,087
1996	53,353	3,460	363	1,785	3,009	39,427	3,330	1,979
Social sciences:								
1994	89,134	6,436	409	3,244	4,000	57,298	2,988	14,759
1995	89,449	6,935	437	3,343	4,237	56,093	3,700	14,704
1996	88,730	7,254	476	3,340	4,244	54,298	3,993	15,125
Engineering:								
1994	113,023	2,784	242	9,777	2,861	56,020	4,355	36,984
1995	107,199	2,856	231	9,008	2,808	51,956	4,873	35,467
1996	103,223	2,894	234	8,450	2,935	49,079	4,581	35,050
Health fields:								
1994	73,291	3,566	342	3,142	2,686	56,268	2,885	4,402
1995	77,177	3,871	341	3,460	3,147	58,549	3,453	4,356
1996	78,956	3,912	369	4,007	3,198	59,133	3,500	4,837

See explanatory information, if any, and SOURCE at end of table.

Table 13. Graduate students in science, engineering, and health fields in all institutions, by sex, field, and citizenship, and by racial/ethnic background of U.S. citizens: 1994-96

Sex, field, and year	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
	Men							
Total, all surveyed fields								
1994	288,373	8,669	771	18,187	7,836	164,645	9,868	78,397
1995	279,392	8,934	834	17,486	8,188	157,476	12,022	74,452
1996	271,857	8,988	865	17,294	8,481	151,337	11,395	73,497
Total, science and engineering fields								
1994	272,120	8,049	693	17,152	7,198	153,625	9,136	76,267
1995	262,327	8,211	753	16,370	7,406	146,046	11,181	72,360
1996	253,738	8,264	769	15,972	7,680	139,423	10,615	71,015
Sciences, total								
1994	177,146	6,082	514	9,190	4,917	106,833	5,483	44,127
1995	173,142	6,254	571	9,142	5,210	102,972	7,069	41,924
1996	168,767	6,313	578	9,303	5,414	98,960	6,812	41,387
Physical sciences								
1994	25,290	497	49	1,253	444	13,745	562	8,740
1995	24,327	529	57	1,159	470	13,004	722	8,386
1996	23,294	550	42	1,095	455	12,373	635	8,144
Earth, atmospheric, & ocean sciences								
1994	10,689	118	26	297	214	7,403	242	2,389
1995	10,336	117	32	264	224	7,247	302	2,150
1996	9,760	116	36	250	234	6,839	293	1,992
Mathematical sciences								
1994	13,044	343	24	735	241	6,824	503	4,374
1995	12,248	385	43	669	248	6,230	520	4,153
1996	11,794	368	24	702	266	5,910	425	4,099
Computer sciences								
1994	26,043	696	36	2,695	473	12,442	1,053	8,648
1995	25,306	652	40	2,715	502	11,664	1,535	8,198
1996	25,802	718	39	2,841	524	11,412	1,486	8,782
Agricultural sciences								
1994	7,911	118	20	168	142	5,002	165	2,296
1995	7,935	150	29	147	154	4,988	235	2,232
1996	7,502	131	23	142	203	4,734	168	2,101
Biological sciences								
1994	29,988	671	77	2,022	769	18,470	714	7,265
1995	29,876	691	87	2,164	854	18,382	963	6,735
1996	29,360	725	93	2,257	852	18,290	943	6,200
Psychology								
1994	16,416	851	97	435	705	12,712	675	941
1995	15,877	817	93	416	762	11,983	949	857
1996	15,460	816	112	471	830	11,612	909	710
Social sciences								
1994	47,765	2,788	185	1,585	1,929	30,235	1,569	9,474
1995	47,237	2,913	190	1,608	1,996	29,474	1,843	9,213
1996	45,795	2,889	209	1,545	2,050	27,790	1,953	9,359
Engineering								
1994	94,974	1,967	179	7,962	2,281	46,792	3,653	32,140
1995	89,185	1,957	182	7,228	2,196	43,074	4,112	30,436
1996	84,971	1,951	191	6,669	2,266	40,463	3,803	29,628
Health fields								
1994	16,253	520	78	1,035	638	11,020	732	2,130
1995	17,065	723	81	1,116	782	11,430	841	2,092
1996	18,119	724	96	1,322	801	11,914	780	2,482

See explanatory information, if any, and SOURCE at end of table.

Table 13. Graduate students in science, engineering, and health fields in all institutions, by sex, field, and citizenship, and by racial/ethnic background of U.S. citizens: 1994-96

Sex, field, and year	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
	Women							
Total, all surveyed fields:								
1994	216,169	12,508	954	11,429	8,131	147,342	7,644	28,161
1995	220,310	13,220	1,023	11,873	9,076	146,944	9,742	28,432
1996	222,669	14,008	1,045	12,689	9,370	145,994	10,086	29,477
Total, science and engineering fields:								
1994	159,131	9,562	690	9,322	6,083	102,094	5,491	25,889
1995	160,198	10,072	763	9,529	6,711	99,825	7,130	26,168
1996	161,832	10,820	772	10,004	6,973	98,775	7,366	27,122
Sciences, total:								
1994	141,082	8,745	627	7,507	5,503	92,866	4,789	21,045
1995	142,184	9,173	714	7,749	6,099	90,943	6,369	21,137
1996	143,580	9,877	729	8,223	6,304	90,159	6,588	21,700
Physical sciences:								
1994	9,159	359	18	670	231	4,677	235	2,969
1995	9,090	368	19	621	262	4,483	298	3,039
1996	9,048	436	18	647	288	4,368	251	3,040
Earth, atmospheric, & ocean sciences:								
1994	5,353	85	23	157	130	3,948	133	877
1995	5,469	102	21	161	142	4,075	171	797
1996	5,514	107	29	161	148	4,111	185	773
Mathematical sciences:								
1994	6,535	330	12	473	128	3,672	231	1,689
1995	6,261	304	27	452	152	3,429	241	1,656
1996	6,221	343	17	523	159	3,291	226	1,662
Computer sciences:								
1994	8,085	486	7	1,361	160	3,267	388	2,416
1995	8,126	503	15	1,338	162	3,075	437	2,596
1996	8,790	560	14	1,436	177	3,031	517	3,055
Agricultural sciences:								
1994	4,288	121	17	108	121	2,970	108	843
1995	4,432	144	30	127	134	2,990	142	865
1996	4,412	137	26	139	164	2,998	101	847
Biological sciences:								
1994	28,155	1,038	106	1,931	882	17,919	715	5,564
1995	28,830	1,188	118	2,133	969	18,109	850	5,463
1996	28,767	1,285	107	2,208	995	18,037	847	5,288
Psychology:								
1994	38,138	2,678	220	1,148	1,780	29,350	1,560	1,402
1995	37,764	2,542	237	1,182	2,037	28,163	2,373	1,230
1996	37,893	2,644	251	1,314	2,179	27,815	2,421	1,269
Social sciences:								
1994	41,369	3,648	224	1,659	2,071	27,063	1,419	5,285
1995	42,212	4,022	247	1,735	2,241	26,619	1,857	5,491
1996	42,935	4,365	267	1,795	2,194	26,508	2,040	5,766
Engineering:								
1994	18,049	817	63	1,815	580	9,228	702	4,844
1995	18,014	899	49	1,780	612	8,882	761	5,031
1996	18,252	943	43	1,781	669	8,616	778	5,422
Health fields:								
1994	57,038	2,946	264	2,107	2,048	45,248	2,153	2,272
1995	60,112	3,148	260	2,344	2,365	47,119	2,612	2,264
1996	60,837	3,188	273	2,685	2,397	47,219	2,720	2,355

NOTE: For 1991 and earlier years, permanent residents were included under "non-U.S. citizens". Beginning in 1992, permanent residents were included with U.S. citizens.

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering.

Table 14. Graduate students in science, engineering, and health fields in public institutions, by detailed field: 1989-96

Field	1989	1990	1991	1992	1993	1994	1995	1996
Total, all surveyed fields	302,597	316,781	330,251	345,759	353,017	353,662	350,301	345,900
Total, science and engineering fields	264,136	275,938	287,076	299,547	303,363	300,537	294,720	288,347
Sciences, total	193,447	201,722	207,826	216,723	221,017	220,739	218,814	215,440
Physical sciences, total	24,235	24,726	25,193	25,687	25,773	25,128	24,527	23,633
Astronomy	516	536	546	561	579	591	556	525
Chemistry	13,645	13,823	13,980	14,426	14,649	14,435	14,402	14,166
Physics	9,753	10,054	10,281	10,283	10,090	9,618	9,114	8,561
Physical sciences, n.e.c.	321	313	386	417	455	484	455	381
Earth, atmos., & ocean sci., total	11,338	11,591	11,928	12,683	13,077	13,189	13,255	12,879
Atmospheric sciences	883	901	948	1,064	1,094	1,090	1,047	1,060
Geosciences	6,617	6,301	6,207	6,356	6,384	6,327	6,279	6,063
Oceanography	1,850	1,919	1,953	2,076	2,134	2,294	2,263	2,184
Earth, atmos., & ocean sci., n.e.c.	1,988	2,470	2,820	3,187	3,465	3,478	3,666	3,572
Mathematical sciences	14,859	15,514	15,602	15,910	15,645	15,204	14,253	13,878
Computer sciences	19,121	20,166	20,867	21,547	21,535	20,560	20,532	20,848
Agricultural sciences	10,766	10,830	10,986	11,332	11,430	11,637	11,842	11,422
Biological sciences, total	36,144	36,793	37,951	39,748	41,403	42,529	42,456	42,006
Anatomy	750	715	765	742	760	805	779	793
Biochemistry	3,473	3,464	3,545	3,655	3,701	3,914	3,861	3,730
Biology	9,328	9,492	9,843	10,313	10,795	10,754	10,621	10,979
Biometry/epidemiology	1,017	1,082	1,226	1,562	1,728	1,732	1,724	1,777
Biophysics	382	356	387	417	426	415	472	459
Botany	2,662	2,564	2,522	2,559	2,573	2,626	2,469	2,367
Cell biology	1,260	1,442	1,587	1,824	2,089	2,285	2,358	2,371
Ecology	974	1,030	1,032	1,123	1,234	1,387	1,490	1,450
Entomology/parasitology	1,115	1,105	1,102	1,127	1,186	1,193	1,179	1,171
Genetics	936	998	1,058	1,133	1,147	1,083	1,077	1,119
Microbio., immunology, & virology	3,624	3,641	3,570	3,556	3,582	3,617	3,554	3,451
Nutrition	3,410	3,465	3,464	3,450	3,523	3,731	3,884	3,786
Pathology	950	928	1,016	1,007	1,012	1,079	1,056	1,059
Pharmacology	1,542	1,634	1,672	1,757	1,871	1,979	1,872	1,797
Physiology	1,515	1,498	1,530	1,526	1,559	1,521	1,548	1,439
Zoology	1,956	1,970	2,036	1,997	1,976	1,951	1,914	1,780
Biosciences, n.e.c.	1,250	1,409	1,596	2,000	2,241	2,457	2,598	2,478
Psychology	26,240	27,634	28,483	29,642	29,574	29,503	29,197	28,287
Social sciences, total	50,744	54,468	56,816	60,174	62,580	62,989	62,752	62,487
Agricultural economics	2,165	2,158	2,249	2,404	2,303	2,174	2,205	2,031
Anthropology (cultural & social)	4,477	4,737	4,965	5,205	5,457	5,646	5,602	5,672
Economics (except agricultural)	7,710	7,959	8,375	8,747	8,768	8,598	8,355	7,953
Geography	3,293	3,343	3,561	3,799	4,052	4,168	4,077	4,013
Linguistics	2,257	2,394	2,382	2,442	2,486	2,419	2,383	2,281
Political science	18,484	20,032	20,757	21,871	22,625	21,983	21,869	21,205
Sociology	5,582	5,909	6,481	6,880	7,167	7,243	7,271	7,223
Sociology/anthropology	679	825	615	690	738	796	749	737
Social sciences, other	6,097	7,111	7,431	8,136	8,984	9,962	10,241	11,372
Engineering, total	70,689	74,216	79,250	82,824	82,346	79,798	75,906	72,907
Aerospace engineering	2,603	2,982	3,241	3,199	3,126	2,917	2,598	2,435
Agricultural engineering	993	898	943	967	970	1,006	981	959
Biomedical engineering	1,205	1,284	1,317	1,535	1,639	1,641	1,656	1,700
Chemical engineering	4,519	4,845	5,166	5,413	5,532	5,592	5,440	5,348
Civil engineering	11,295	11,688	13,136	14,752	14,743	14,948	14,534	14,091
Electrical engineering	20,368	21,142	22,475	23,610	23,066	21,943	20,636	19,523
Engineering science	1,257	1,226	1,367	1,470	1,432	1,368	1,294	1,252
Industrial/manufacturing eng	6,954	7,174	8,390	9,095	9,228	9,193	8,593	8,105
Mechanical engineering	11,190	11,825	12,769	13,656	13,489	12,992	12,144	11,595
Metallurgical/materials eng	2,870	3,194	3,461	3,769	3,741	3,667	3,454	3,313
Nuclear engineering	1,107	1,073	1,093	1,081	1,094	1,062	975	826
Engineering, other	6,328	6,885	5,892	4,277	4,286	3,469	3,601	3,760
Total health fields	38,461	40,843	43,175	46,212	49,654	53,125	55,581	57,553
Clinical fields	1,278	1,322	1,385	1,620	1,670	1,845	1,832	1,952
Dental sciences	745	746	791	840	862	919	925	992
Nursing	14,978	15,999	16,709	17,689	19,094	21,232	22,116	21,584
Pharmaceutical sciences	2,130	2,218	2,243	2,258	2,349	2,335	2,385	2,429
Preventive medicine/community health	4,946	5,641	5,927	6,079	6,860	6,929	7,254	7,135
Speech pathology/audiology	6,698	7,162	7,635	8,227	8,800	9,423	9,918	10,778
Veterinary sciences	718	821	821	880	802	807	875	894
Other health fields	6,968	6,934	7,664	8,619	9,217	9,635	10,276	11,789

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 15. Graduate students in science, engineering, and health fields in private institutions, by detailed field: 1989-96

Field	1989	1990	1991	1992	1993	1994	1995	1996
Total, all surveyed fields	131,970	135,397	141,011	147,873	151,432	150,880	149,401	148,626
Total, science and engineering fields	118,611	121,197	125,621	131,097	132,523	130,714	127,805	127,223
Sciences, total	85,257	87,788	91,295	95,886	98,011	97,489	96,512	96,907
Physical sciences, total	9,381	9,349	9,517	9,661	9,545	9,321	8,890	8,709
Astronomy	273	274	283	308	301	382	356	349
Chemistry	5,183	5,295	5,427	5,503	5,482	5,362	5,192	5,179
Physics	3,904	3,759	3,800	3,839	3,751	3,544	3,311	3,167
Physical sciences, n.e.c.	21	21	7	11	11	33	31	14
Earth, atmos., & ocean sci., total	2,305	2,393	2,552	2,664	2,728	2,853	2,550	2,395
Atmospheric sciences	29	28	20	25	18	19	25	20
Geosciences	1,435	1,391	1,360	1,388	1,401	1,414	1,329	1,260
Oceanography	357	414	433	454	477	559	440	414
Earth, atmos., & ocean sci., n.e.c.	484	560	739	797	832	861	756	701
Mathematical sciences	4,388	4,260	4,350	4,445	4,355	4,375	4,256	4,137
Computer sciences	13,361	14,091	13,743	14,746	14,654	13,568	12,900	13,744
Agricultural sciences	424	486	520	495	484	562	525	492
Biological sciences, total	12,708	13,196	13,827	14,429	15,049	15,614	16,250	16,121
Anatomy	328	285	286	288	267	274	277	318
Biochemistry	1,609	1,575	1,656	1,721	1,812	1,718	1,659	1,535
Biology	3,433	3,535	3,449	3,561	3,532	3,466	3,663	3,656
Biometry/epidemiology	705	789	806	803	930	978	1,088	1,224
Biophysics	273	286	310	334	354	379	373	374
Botany	164	169	172	130	141	122	140	137
Cell biology	974	1,113	1,222	1,269	1,285	1,483	1,532	1,525
Ecology	110	106	148	178	178	179	190	165
Entomology/parasitology	66	68	69	66	61	70	62	63
Genetics	429	410	462	506	638	616	623	610
Microbio., immunology, & virology	1,203	1,232	1,358	1,416	1,486	1,524	1,518	1,512
Nutrition	754	707	700	709	865	1,016	1,132	1,073
Pathology	419	426	433	449	563	628	614	597
Pharmacology	725	719	760	772	774	851	828	855
Physiology	691	738	802	791	813	857	992	936
Zoology	127	134	155	142	144	141	154	130
Biosciences, n.e.c.	698	904	1,039	1,294	1,208	1,312	1,405	1,409
Psychology	19,288	20,533	22,860	23,842	24,983	25,051	24,444	25,066
Social sciences, total	23,402	23,480	23,926	25,604	26,213	26,145	26,697	26,243
Agricultural economics	111	115	115	118	112	115	133	86
Anthropology (cultural & social)	1,651	1,742	1,766	1,918	1,904	2,019	2,091	2,095
Economics (except agricultural)	4,429	4,367	4,332	4,505	4,446	4,315	4,318	4,127
Geography	186	187	199	303	326	334	294	316
Linguistics	1,029	1,010	1,043	835	835	860	811	875
Political science	10,710	10,550	10,950	11,926	12,451	12,334	12,429	12,137
Sociology	1,823	1,892	1,912	2,131	2,258	2,255	2,293	2,205
Sociology anthropology	309	339	284	289	197	191	192	186
Social sciences, other	3,154	3,278	3,325	3,579	3,684	3,722	4,136	4,214
Engineering, total	33,354	33,409	34,326	35,211	34,512	33,225	31,293	30,316
Aerospace engineering	921	952	879	837	814	798	745	773
Agricultural engineering	50	48	40	41	48	55	56	53
Biomedical engineering	711	852	922	1,002	1,036	1,109	1,076	1,032
Chemical engineering	1,941	1,890	1,961	1,984	1,984	2,016	1,984	2,025
Civil engineering	3,614	3,854	4,262	4,820	4,840	4,977	4,684	4,437
Electrical engineering	12,889	12,580	12,707	12,850	12,249	11,107	10,111	10,213
Engineering science	820	794	787	748	748	721	661	499
Industrial/manufacturing eng.	4,140	4,074	4,286	4,430	4,368	4,468	4,550	4,294
Mechanical engineering	5,075	5,054	4,961	4,981	4,988	4,769	4,219	3,914
Metallurgical/materials eng.	1,724	1,747	1,699	1,743	1,622	1,524	1,466	1,400
Nuclear engineering	216	205	189	205	212	184	179	154
Engineering, other	1,253	1,359	1,633	1,570	1,604	1,497	1,562	1,522
Total, health fields	13,359	14,200	15,390	16,776	18,909	20,166	21,596	21,403
Clinical fields	588	617	896	1,088	1,227	1,268	1,277	1,193
Dental sciences	259	210	225	281	273	280	326	299
Nursing	4,711	5,195	5,303	5,524	5,687	5,765	6,289	5,883
Pharmaceutical sciences	557	671	725	546	522	566	563	546
Preventive medicine/community health	2,676	2,526	2,496	2,658	3,116	3,530	3,604	3,429
Speech pathology/audiology	1,213	1,192	1,310	1,564	1,940	2,050	2,174	2,195
Veterinary sciences	83	79	73	62	75	68	54	52
Other health fields	3,172	3,710	4,362	5,053	6,069	6,639	7,309	7,806

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 16. Graduate students in science and engineering fields in all institutions, by field and Carnegie classification: 1989-96

Carnegie classification and field	1989	1990	1991	1992	1993	1994	1995	1996
All institutions:								
Total, science and engineering fields	382,747	397,135	412,697	430,644	435,886	431,251	422,525	415,570
Sciences, total	278,704	289,510	299,121	312,609	319,028	318,228	315,326	312,347
Physical sciences	33,616	34,075	34,710	35,348	35,318	34,449	33,417	32,342
Earth, atmospheric, & ocean sciences	13,643	13,984	14,480	15,347	15,805	16,042	15,805	15,274
Mathematical sciences	19,247	19,774	19,952	20,355	20,000	19,579	18,509	18,015
Computer sciences	32,482	34,257	34,610	36,293	36,189	34,128	33,432	34,592
Agricultural sciences	11,190	11,316	11,506	11,827	11,914	12,199	12,367	11,914
Biological sciences	48,852	49,989	51,778	54,177	56,452	58,143	58,706	58,127
Psychology	45,528	48,167	51,343	53,484	54,557	54,554	53,641	53,353
Social sciences	74,146	77,948	80,742	85,778	88,793	89,134	89,449	88,730
Engineering, total	104,043	107,625	113,576	118,035	116,858	113,023	107,199	103,223
Research I:								
Total, science and engineering fields	136,308	139,029	141,656	146,176	147,642	146,308	143,285	139,626
Sciences, total	96,593	98,415	99,622	102,709	104,369	104,485	103,392	101,393
Physical sciences	14,948	15,201	15,152	15,323	15,380	14,984	14,524	14,029
Earth, atmospheric, & ocean sciences	4,903	4,901	4,902	5,096	5,135	5,183	5,171	4,939
Mathematical sciences	6,838	6,955	7,032	7,229	7,041	6,887	6,672	6,539
Computer sciences	7,523	7,716	7,804	7,980	8,191	7,936	7,808	7,865
Agricultural sciences	5,124	5,203	5,226	5,186	5,225	5,302	5,418	5,272
Biological sciences	21,485	21,932	22,398	23,079	24,089	24,766	24,797	24,430
Psychology	7,366	7,628	7,753	8,061	8,076	7,922	7,817	7,738
Social sciences	28,406	28,879	29,355	30,755	31,232	31,505	31,185	30,582
Engineering, total	39,715	40,614	42,034	43,467	43,273	41,823	39,893	38,233
Research II:								
Total, science and engineering fields	32,461	33,811	36,402	38,430	38,681	37,353	36,171	35,187
Sciences, total	21,843	22,956	24,288	25,746	26,083	25,491	24,971	24,683
Physical sciences	3,095	3,150	3,280	3,407	3,385	3,287	3,168	3,046
Earth, atmospheric, & ocean sciences	1,380	1,346	1,323	1,418	1,459	1,492	1,442	1,363
Mathematical sciences	1,727	1,863	1,986	1,962	1,868	1,783	1,628	1,520
Computer sciences	2,054	2,124	2,290	2,752	2,728	2,595	2,443	2,597
Agricultural sciences	1,583	1,539	1,601	1,775	1,775	1,811	1,848	1,705
Biological sciences	3,617	3,737	3,907	3,956	4,042	4,050	4,097	3,941
Psychology	2,600	2,759	3,050	3,246	3,180	2,995	3,023	2,892
Social sciences	5,787	6,438	6,851	7,230	7,646	7,478	7,322	7,519
Engineering, total	10,618	10,855	12,114	12,684	12,598	11,862	11,200	10,504
Doctorate-granting:								
Total, science and engineering fields	64,359	66,849	68,590	71,623	73,132	73,383	71,028	71,598
Sciences, total	48,050	50,059	50,788	53,582	54,969	55,554	54,634	55,048
Physical sciences	4,731	4,742	4,900	4,923	4,879	4,877	4,689	4,700
Earth, atmospheric, & ocean sciences	2,026	2,103	2,317	2,492	2,502	2,599	2,580	2,521
Mathematical sciences	3,342	3,389	3,464	3,574	3,524	3,480	3,160	3,134
Computer sciences	9,430	10,047	9,474	9,925	10,191	9,871	9,755	9,937
Agricultural sciences	460	509	485	576	552	671	678	668
Biological sciences	4,977	5,001	5,299	5,594	5,793	5,954	6,087	6,194
Psychology	10,585	11,163	11,303	11,765	11,855	12,164	11,764	11,781
Social sciences	12,499	13,105	13,646	14,733	15,673	15,938	15,921	16,113
Engineering, total	16,309	16,790	17,802	18,041	18,163	17,829	16,394	16,550

See explanatory information, if any, and SOURCE at end of table.

Table 16. Graduate students in science and engineering fields in all institutions, by field and Carnegie classification: 1989-96

Carnegie classification and field	1989	1990	1991	1992	1993	1994	1995	1996
Comprehensive:								
Total, science and engineering fields	50,615	53,642	57,076	60,106	61,213	59,803	59,351	58,411
Sciences, total	41,349	43,781	46,388	48,657	50,445	49,734	49,848	49,378
Physical sciences	2,148	2,169	2,329	2,292	2,396	2,318	2,282	2,115
Earth, atmospheric, & ocean sciences	1,253	1,290	1,481	1,718	1,925	1,982	2,032	2,008
Mathematical sciences	2,951	3,079	2,961	2,934	2,969	2,857	2,677	2,624
Computer sciences	6,650	7,129	7,675	8,013	7,578	6,682	6,565	6,919
Agricultural sciences	878	934	965	973	1,017	966	1,022	1,006
Biological sciences	4,537	4,588	4,706	5,043	5,629	5,714	6,058	5,830
Psychology	11,836	12,943	14,172	14,890	15,731	15,744	15,497	15,524
Social sciences	11,096	11,649	12,099	12,794	13,200	13,471	13,715	13,352
Engineering, total	9,266	9,861	10,688	11,449	10,768	10,069	9,503	9,033
Engineering:								
Total, science and engineering fields	1,153	1,777	2,026	2,178	2,196	2,230	2,337	2,137
Sciences, total	361	527	569	615	633	586	578	540
Physical sciences	78	95	113	118	123	111	106	105
Earth, atmospheric, & ocean sciences	154	184	164	180	194	181	166	160
Mathematical sciences	16	11	17	14	18	11	8	9
Computer sciences	107	226	267	293	292	275	284	250
Agricultural sciences	0	0	0	0	0	0	1	0
Biological sciences	6	11	8	10	6	8	13	16
Psychology	0	0	0	0	0	0	0	0
Social sciences	0	0	0	0	0	0	0	0
Engineering, total	792	1,250	1,457	1,563	1,563	1,644	1,759	1,597
Liberal arts:								
Total, science and engineering fields	1,725	1,847	2,326	2,409	2,305	2,307	2,151	2,037
Sciences, total	1,561	1,690	2,102	2,173	2,097	2,126	1,986	1,892
Physical sciences	105	105	117	119	115	110	102	101
Earth, atmospheric, & ocean sciences	94	93	144	162	157	160	143	142
Mathematical sciences	28	32	33	36	36	37	30	30
Computer sciences	71	65	56	55	39	26	23	23
Agricultural sciences	43	67	95	86	71	68	60	47
Biological sciences	118	123	133	133	135	135	128	132
Psychology	986	1,085	1,422	1,442	1,417	1,450	1,382	1,298
Social sciences	116	120	102	140	127	140	118	119
Engineering, total	164	157	224	236	208	181	165	145
Other:								
Total, science and engineering fields	96,126	100,180	104,621	109,722	110,717	109,867	108,202	106,574
Sciences, total	68,947	72,082	75,364	79,127	80,432	80,252	79,917	79,413
Physical sciences	8,511	8,613	8,919	9,166	9,040	8,762	8,546	8,247
Earth, atmospheric, & ocean sciences	3,833	4,067	4,149	4,281	4,433	4,445	4,271	4,141
Mathematical sciences	4,345	4,445	4,459	4,606	4,544	4,524	4,334	4,159
Computer sciences	6,647	6,950	7,044	7,275	7,170	6,743	6,554	6,901
Agricultural sciences	3,102	3,064	3,134	3,231	3,274	3,381	3,340	3,216
Biological sciences	14,112	14,597	15,327	16,362	16,758	17,516	17,526	17,584
Psychology	12,155	12,589	13,643	14,080	14,298	14,279	14,158	14,120
Social sciences	16,242	17,757	18,689	20,126	20,915	20,602	21,188	21,045
Engineering, total	27,179	28,098	29,257	30,595	30,285	29,615	28,285	27,161

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 17. Full-time graduate students in science, engineering, and health fields in all institutions, by detailed field: 1989-96

Field	1989	1990	1991	1992	1993	1994	1995	1996
Total, all surveyed fields	282,719	292,830	307,040	322,609	329,679	332,129	329,118	328,368
Total, science and engineering fields	256,906	265,399	277,174	290,510	294,030	293,048	287,223	284,064
Sciences, total	192,531	199,422	206,140	216,084	220,233	221,482	219,449	218,213
Physical sciences, total	29,207	29,485	30,117	30,673	30,611	30,043	28,902	27,944
Astronomy	762	790	810	840	848	953	871	854
Chemistry	16,278	16,382	16,731	16,999	17,204	17,104	16,762	16,494
Physics	12,040	12,191	12,442	12,689	12,397	11,766	11,052	10,400
Physical sciences, n.e.c.	127	122	134	145	162	220	217	196
Earth, atmos., & ocean sci., total	10,021	10,244	10,373	10,986	11,367	11,470	11,275	10,828
Atmospheric sciences	810	828	859	959	980	993	959	982
Geosciences	5,983	5,799	5,688	5,885	5,970	5,946	5,796	5,579
Oceanography	1,799	1,934	1,991	2,133	2,177	2,333	2,228	2,074
Earth, atmos., & ocean sci., n.e.c.	1,429	1,683	1,835	2,009	2,240	2,198	2,292	2,193
Mathematical sciences	13,681	13,865	14,256	14,679	14,530	14,226	13,410	12,966
Computer sciences	15,606	16,689	16,516	17,486	17,374	16,674	16,490	17,173
Agricultural sciences	9,070	9,100	9,289	9,452	9,468	9,492	9,620	9,298
Biological sciences, total	40,348	40,945	42,700	44,389	46,481	48,017	48,300	47,743
Anatomy	999	911	961	960	977	983	978	1,042
Biochemistry	4,810	4,825	4,954	5,045	5,174	5,222	5,173	4,971
Biology	9,169	9,149	9,439	9,678	10,028	10,086	9,973	10,043
Biometry/epidemiology	1,211	1,231	1,431	1,634	1,990	2,056	2,093	2,162
Biophysics	610	605	679	728	755	770	800	807
Botany	2,443	2,354	2,304	2,301	2,353	2,349	2,149	2,130
Cell biology	2,177	2,485	2,716	2,961	3,189	3,596	3,694	3,670
Ecology	873	884	919	997	1,057	1,203	1,304	1,243
Entomology/parasitology	1,009	997	1,014	1,016	1,039	1,066	1,041	1,027
Genetics	1,254	1,297	1,412	1,526	1,690	1,602	1,619	1,653
Microbio., immunology, & virology	4,329	4,372	4,408	4,460	4,607	4,705	4,673	4,537
Nutrition	2,784	2,829	2,878	2,863	3,045	3,221	3,431	3,482
Pathology	1,104	1,083	1,113	1,165	1,296	1,389	1,382	1,355
Pharmacology	2,135	2,222	2,304	2,397	2,500	2,672	2,529	2,499
Physiology	2,057	2,076	2,163	2,160	2,220	2,221	2,376	2,217
Zoology	1,768	1,677	1,782	1,789	1,747	1,717	1,746	1,627
Biosciences, n.e.c.	1,616	1,948	2,223	2,709	2,814	3,159	3,339	3,278
Psychology	29,348	30,618	32,258	34,162	34,782	35,288	35,222	35,302
Social sciences, total	45,250	48,476	50,631	54,257	55,620	56,272	56,230	56,959
Agricultural economics	1,912	1,961	2,011	2,105	1,963	1,936	1,977	1,784
Anthropology (cultural & social)	4,411	4,809	5,079	5,337	5,429	5,837	5,792	6,011
Economics (except agricultural)	9,078	9,293	9,850	10,184	10,107	9,945	9,743	9,548
Geography	2,358	2,374	2,539	2,801	3,026	3,119	2,962	2,959
Linguistics	2,465	2,56[illegible]	2,549	2,477	2,538	2,518	2,486	2,530
Political science	13,998	15,325	16,083	17,667	18,372	17,918	17,630	17,713
Sociology	5,300	5,714	5,949	6,469	6,625	6,720	6,692	6,609
Sociology/anthropology	606	744	624	651	639	693	663	620
Social sciences, other	5,122	5,670	5,947	6,566	6,921	7,586	8,285	9,185
Engineering, total	64,375	65,977	71,034	74,426	73,797	71,566	67,774	65,851
Aerospace engineering	2,772	3,010	3,325	3,306	3,262	3,000	2,693	2,576
Agricultural engineering	861	799	823	840	835	879	859	799
Biomedical engineering	1,610	1,798	1,925	2,167	2,269	2,292	2,315	2,316
Chemical engineering	5,282	5,443	5,788	5,946	6,041	6,105	5,957	5,909
Civil engineering	9,964	10,128	11,328	12,454	12,458	12,641	12,248	11,791
Electrical engineering	18,466	18,675	19,904	20,996	20,370	19,412	18,187	17,989
Engineering science	1,259	1,252	1,364	1,415	1,397	1,347	1,243	1,057
Industrial/manufacturing eng.	4,658	4,770	5,598	6,081	5,902	5,910	5,342	5,128
Mechanical engineering	10,492	10,867	11,687	12,383	12,395	11,875	11,128	10,690
Metallurgical/materials eng.	3,720	3,930	4,058	4,274	4,249	4,108	3,880	3,693
Nuclear engineering	1,112	1,080	1,080	1,084	1,070	997	883	771
Engineering, other	4,179	4,225	4,154	3,480	3,549	3,000	3,039	3,132
Total, health fields	25,813	27,431	29,866	32,099	35,649	39,081	41,895	44,304
Clinical fields	1,491	1,557	1,811	2,038	2,217	2,374	2,347	2,395
Dental sciences	856	827	875	988	1,005	1,048	1,096	1,116
Nursing	5,987	6,148	6,475	6,422	6,875	7,914	8,561	8,677
Pharmaceutical sciences	2,045	2,148	2,198	2,074	2,133	2,188	2,152	2,226
Preventive medicine/community health	4,219	4,510	4,419	4,789	5,334	5,425	5,904	5,803
Speech pathology/audiology	5,602	5,767	6,499	7,144	8,109	8,707	9,064	9,649
Veterinary sciences	668	709	717	754	693	696	733	736
Other health fields	4,945	5,765	6,872	7,890	9,283	10,729	12,038	13,702

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 18. Male full-time graduate students in science, engineering, and health fields in all institutions, by detailed field: 1989-96

Field	1989	1990	1991	1992	1993	1994	1995	1996
Total, all surveyed fields	182,791	186,724	193,540	200,824	200,790	197,428	191,187	187,111
Total, science and engineering fields	175,106	178,695	185,090	191,791	190,864	186,675	179,820	174,756
Sciences, total	118,867	121,416	123,739	128,029	128,266	126,686	123,542	120,731
Physical sciences, total	22,547	22,664	22,845	23,173	22,888	22,277	21,238	20,405
Astronomy	626	629	641	659	658	732	657	630
Chemistry	11,421	11,420	11,404	11,482	11,465	11,309	11,022	10,829
Physics	10,425	10,546	10,727	10,945	10,658	10,093	9,431	8,839
Physical sciences, n.e.c.	75	69	73	87	107	143	128	107
Earth, atmos., & ocean sci., total	7,268	7,317	7,197	7,588	7,815	7,676	7,387	6,954
Atmospheric sciences	648	653	682	760	783	775	742	772
Geosciences	4,547	4,377	4,154	4,296	4,338	4,174	4,000	3,780
Oceanography	1,220	1,294	1,306	1,357	1,385	1,476	1,360	1,235
Earth, atmos., & ocean sci., n.e.c.	853	993	1,055	1,175	1,309	1,251	1,285	1,167
Mathematical sciences	9,746	9,821	10,035	10,250	10,096	9,810	9,213	8,797
Computer sciences	12,355	13,218	13,035	13,936	13,791	13,127	12,840	13,088
Agricultural sciences	6,557	6,454	6,424	6,454	6,281	6,166	6,158	5,847
Biological sciences, total	22,736	22,789	23,498	24,230	24,920	25,493	25,283	24,737
Anatomy	558	500	507	509	517	507	513	557
Biochemistry	2,897	2,852	2,923	2,979	2,979	3,020	2,938	2,826
Biology	5,231	5,195	5,202	5,253	5,421	5,479	5,315	5,317
Biometry/epidemiology	550	593	649	727	887	882	872	884
Biophysics	464	452	498	528	533	554	568	567
Botany	1,502	1,439	1,396	1,397	1,409	1,354	1,202	1,164
Cell biology	1,259	1,394	1,480	1,625	1,714	1,949	2,002	1,969
Ecology	531	538	531	557	565	641	705	662
Entomology parasitology	693	694	720	714	709	710	698	680
Genetics	625	631	711	744	811	748	789	799
Microbio., immunology, & virology	2,358	2,314	2,339	2,363	2,388	2,443	2,419	2,325
Nutrition	936	950	991	949	1,004	986	1,012	1,015
Pathology	677	641	666	656	707	773	751	704
Pharmacology	1,215	1,249	1,230	1,278	1,327	1,400	1,308	1,282
Physiology	1,234	1,226	1,288	1,295	1,326	1,319	1,394	1,314
Zoology	1,085	1,003	1,070	1,101	1,037	987	1,014	920
Biosciences, n.e.c.	921	1,118	1,297	1,555	1,586	1,741	1,783	1,752
Psychology	10,467	10,642	10,957	11,171	11,189	11,131	10,903	10,722
Social sciences, total	27,191	28,511	29,748	31,227	31,286	31,006	30,520	30,181
Agricultural economics	1,419	1,442	1,477	1,512	1,358	1,302	1,314	1,195
Anthropology (cultural & social)	1,880	2,054	2,123	2,193	2,258	2,384	2,434	2,464
Economics (except agricultural)	6,784	6,843	7,175	7,343	7,253	7,091	6,844	6,640
Geography	1,567	1,585	1,667	1,851	1,966	2,028	1,869	1,878
Linguistics	1,075	1,142	1,151	1,025	1,053	997	981	943
Political science	8,719	9,259	9,724	10,444	10,595	10,226	9,889	9,784
Sociology	2,526	2,664	2,809	2,912	2,766	2,715	2,719	2,689
Sociology anthropology	279	310	291	287	308	278	269	258
Social sciences, other	2,942	3,212	3,331	3,660	3,729	3,985	4,201	4,330
Engineering, total	56,239	57,279	61,351	63,762	62,598	59,989	56,278	54,025
Aerospace engineering	2,592	2,811	3,071	3,043	2,971	2,722	2,417	2,293
Agricultural engineering	792	717	715	714	709	704	679	619
Biomedical engineering	1,215	1,338	1,422	1,640	1,685	1,703	1,689	1,678
Chemical engineering	4,486	4,547	4,803	4,849	4,875	4,942	4,734	4,594
Civil engineering	8,315	8,347	9,309	10,126	9,934	9,855	9,431	8,937
Electrical engineering	16,644	16,719	17,739	18,570	17,926	17,021	15,747	15,441
Engineering science	1,120	1,075	1,182	1,230	1,195	1,145	1,061	883
Industrial/manufacturing eng.	3,751	3,862	4,556	4,906	4,729	4,612	4,191	4,037
Mechanical engineering	9,637	10,019	10,745	11,297	11,210	10,638	9,993	9,500
Metallurgical/materials eng.	3,081	3,238	3,316	3,467	3,447	3,268	3,064	2,878
Nuclear engineering	993	952	935	935	926	880	776	649
Engineering, other	3,613	3,654	3,558	2,985	2,991	2,509	2,496	2,516
Total, health fields	7,685	8,029	8,450	9,033	9,926	10,753	11,367	12,355
Clinical fields	832	885	995	1,040	1,110	1,126	1,111	1,156
Dental sciences	620	590	623	684	702	723	726	722
Nursing	445	403	468	464	546	609	707	787
Pharmaceutical sciences	1,238	1,317	1,303	1,213	1,201	1,221	1,192	1,223
Preventive medicine/community health	1,694	1,874	1,778	1,886	2,114	2,153	2,248	2,285
Speech pathology/audiology	559	523	506	578	665	690	695	746
Veterinary sciences	400	415	436	439	372	369	378	384
Other health fields	1,897	2,022	2,341	2,729	3,216	3,862	4,310	5,052

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 19. Female full-time graduate students in science, engineering, and health fields in all institutions, by detailed field: 1989-96

Field	1989	1990	1991	1992	1993	1994	1995	1996
Total, all surveyed fields	99,928	106,106	113,500	121,785	128,889	134,701	137,931	141,257
Total, science and engineering fields	81,800	86,704	92,084	98,719	103,166	106,373	107,403	109,308
Sciences, total	73,664	78,006	82,401	88,055	91,967	94,796	95,907	97,482
Physical sciences, total	6,660	6,821	7,272	7,500	7,723	7,766	7,664	7,539
Astronomy	136	161	169	181	190	221	214	224
Chemistry	4,857	4,962	5,327	5,517	5,739	5,795	5,740	5,665
Physics	1,615	1,645	1,715	1,744	1,739	1,673	1,621	1,561
Physical sciences, n.e.c.	52	53	61	58	55	77	89	89
Earth, atmos., & ocean sci., total	2,753	2,927	3,176	3,398	3,552	3,794	3,888	3,874
Atmospheric sciences	162	175	177	199	197	218	217	210
Geosciences	1,436	1,422	1,534	1,589	1,632	1,772	1,796	1,799
Oceanography	579	640	685	776	792	857	868	839
Earth, atmos., & ocean sci., n.e.c.	576	690	780	834	931	947	1,007	1,026
Mathematical sciences	3,935	4,044	4,221	4,429	4,434	4,416	4,197	4,169
Computer sciences	3,251	3,471	3,481	3,550	3,583	3,547	3,650	4,085
Agricultural sciences	2,513	2,646	2,865	2,998	3,187	3,326	3,462	3,451
Biological sciences, total	17,612	18,156	19,202	20,159	21,561	22,524	23,017	23,006
Anatomy	441	411	454	451	460	476	465	485
Biochemistry	1,913	1,973	2,031	2,066	2,195	2,202	2,235	2,145
Biology	3,938	3,954	4,237	4,425	4,607	4,607	4,658	4,726
Biometry/epidemiology	661	638	782	907	1,103	1,174	1,221	1,278
Biophysics	146	153	181	200	222	216	232	240
Botany	941	915	908	904	944	995	947	966
Cell biology	918	1,091	1,236	1,336	1,475	1,647	1,692	1,701
Ecology	342	346	388	440	492	562	599	581
Entomology/parasitology	316	303	294	302	330	356	343	347
Genetics	629	666	701	782	879	854	830	854
Microbio., immunology, & virology	1,971	2,058	2,069	2,097	2,219	2,262	2,254	2,212
Nutrition	1,848	1,879	1,887	1,914	2,041	2,235	2,419	2,467
Pathology	427	442	447	509	589	616	631	651
Pharmacology	920	973	1,074	1,119	1,173	1,272	1,221	1,217
Physiology	823	850	875	865	894	902	982	903
Zoology	683	674	712	688	710	730	732	707
Biosciences, n.e.c.	695	830	926	1,154	1,228	1,418	1,556	1,526
Psychology	18,881	19,976	21,301	22,991	23,593	24,157	24,319	24,580
Social sciences, total	18,059	19,965	20,883	23,030	24,334	25,266	25,710	26,778
Agricultural economics	493	519	534	593	605	634	663	589
Anthropology (cultural & social)	2,531	2,755	2,956	3,144	3,171	3,453	3,358	3,547
Economics (except agricultural)	2,294	2,450	2,675	2,841	2,854	2,854	2,899	2,908
Geography	791	789	872	950	1,060	1,091	1,093	1,081
Linguistics	1,390	1,444	1,398	1,452	1,485	1,521	1,505	1,587
Political science	5,279	6,066	6,359	7,223	7,777	7,692	7,741	7,929
Sociology	2,774	3,050	3,140	3,557	3,859	4,005	3,973	3,920
Sociology/anthropology	327	434	333	364	331	415	394	362
Social sciences, other	2,180	2,458	2,616	2,906	3,192	3,601	4,084	4,855
Engineering, total	8,136	8,698	9,683	10,664	11,199	11,577	11,496	11,826
Aerospace engineering	180	199	254	263	291	279	276	283
Agricultural engineering	69	82	108	126	126	175	180	180
Biomedical engineering	395	460	503	527	584	589	626	638
Chemical engineering	796	896	985	1,097	1,166	1,193	1,223	1,315
Civil engineering	1,649	1,781	2,019	2,328	2,524	2,786	2,817	2,854
Electrical engineering	1,822	1,956	2,165	2,426	2,444	2,391	2,440	2,548
Engineering science	139	177	182	185	202	202	182	174
Industrial/manufacturing eng	907	908	1,042	1,175	1,173	1,298	1,151	1,091
Mechanical engineering	855	848	942	1,086	1,185	1,217	1,135	1,190
Metallurgical/materials eng	639	692	742	807	802	840	816	815
Nuclear engineering	119	128	145	149	144	117	107	122
Engineering, other	566	571	596	495	558	491	543	616
Total, health fields	18,128	19,402	21,416	23,066	25,723	28,328	30,528	31,949
Clinical fields	659	672	816	998	1,107	1,248	1,236	1,239
Dental sciences	236	237	252	304	303	325	370	394
Nursing	5,542	5,745	6,007	5,958	6,329	7,305	7,854	7,890
Pharmaceutical sciences	807	831	895	861	932	967	960	1,003
Preventive medicine/community health	2,525	2,636	2,641	2,903	3,220	3,272	3,656	3,518
Speech pathology/audiology	5,043	5,244	5,993	6,566	7,444	8,017	8,369	8,903
Veterinary sciences	268	294	281	315	321	327	355	352
Other health fields	3,048	3,743	4,531	5,161	6,067	6,867	7,728	8,650

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 20. Full-time graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and racial/ethnic background of U.S. citizens: 1989-96

Field, citizenship, and racial/ethnic background	1989	1990	1991	1992	1993	1994	1995	1996
Total, all surveyed fields	282,719	292,830	307,040	322,609	329,679	332,129	329,118	328,368
Total U.S. citizens	195,947	201,679	211,592	225,879	236,316	242,299	242,411	241,041
Black, non-Hispanic	7,615	8,112	8,863	10,219	11,387	11,965	12,501	12,982
American Indian/Alaskan Native	659	763	857	1,014	1,063	1,138	1,254	1,305
Asian/Pacific Islander	10,708	11,651	12,489	14,709	16,941	19,177	19,070	19,527
Hispanic	6,974	7,571	8,195	9,076	9,798	9,878	11,040	11,333
White, non-Hispanic	161,178	166,607	172,434	181,698	187,128	191,378	187,774	185,517
Other or unknown	8,813	6,975	8,754	9,163	9,999	8,763	10,772	10,377
Non-U.S. citizens	86,772	91,151	95,448	96,730	93,363	89,830	86,707	87,327
Total, science and engineering	256,906	265,399	277,174	290,510	294,030	293,048	287,223	284,064
Total U.S. citizens	173,420	177,804	185,487	197,473	204,484	206,851	204,143	200,707
Black, non-Hispanic	6,594	7,029	7,692	8,904	9,903	10,343	10,668	10,976
American Indian/Alaskan Native	551	655	717	847	896	960	1,055	1,084
Asian/Pacific Islander	9,819	10,610	11,267	13,317	15,197	17,170	16,769	16,832
Hispanic	5,924	6,389	6,931	7,595	8,200	8,184	9,082	9,308
White, non-Hispanic	142,457	146,697	150,939	158,434	161,321	162,784	157,480	153,742
Other or unknown	8,075	6,424	7,941	8,376	8,967	7,410	9,089	8,765
Non-U.S. citizens	83,486	87,595	91,687	93,037	89,546	86,197	83,080	83,357
Sciences, total	192,531	199,422	206,140	216,084	220,233	221,482	219,449	218,213
Total U.S. citizens	139,351	143,340	148,396	157,575	163,261	165,684	165,544	164,211
Black, non-Hispanic	5,651	6,079	6,552	7,545	8,413	8,640	8,978	9,313
American Indian/Alaskan Native	486	590	610	741	773	826	919	943
Asian/Pacific Islander	6,524	7,051	7,424	8,820	10,336	11,446	11,629	12,004
Hispanic	4,921	5,315	5,770	6,222	6,682	6,564	7,459	7,650
White, non-Hispanic	116,408	119,909	122,871	128,490	130,976	132,701	129,680	127,568
Other or unknown	5,361	4,396	5,169	5,757	6,081	5,507	6,879	6,733
Non-U.S. citizens	53,180	56,082	57,744	58,509	56,972	55,798	53,905	54,002
Physical sciences	29,207	29,485	30,117	30,673	30,611	30,043	28,902	27,944
Total U.S. citizens	18,107	17,836	18,267	18,759	19,231	19,130	18,410	17,639
Black, non-Hispanic	483	488	529	630	690	709	729	769
American Indian/Alaskan Native	39	56	56	63	73	60	66	55
Asian/Pacific Islander	1,023	1,017	1,219	1,336	1,652	1,600	1,462	1,422
Hispanic	581	530	562	572	591	575	586	604
White, non-Hispanic	15,230	15,377	15,412	15,566	15,681	15,652	14,813	14,162
Other or unknown	751	368	489	592	544	534	754	627
Non-U.S. citizens	11,100	11,649	11,850	11,914	11,380	10,913	10,492	10,305
Earth, atmospheric, & ocean sciences	10,021	10,244	10,373	10,986	11,367	11,470	11,275	10,828
Total U.S. citizens	7,717	7,813	7,802	8,309	8,680	8,608	8,689	8,434
Black, non-Hispanic	66	85	97	128	142	129	136	130
American Indian/Alaskan Native	20	25	18	23	29	39	40	42
Asian/Pacific Islander	162	188	200	287	375	328	318	291
Hispanic	170	187	194	222	289	240	259	264
White, non-Hispanic	7,099	7,141	7,041	7,302	7,516	7,678	7,657	7,449
Other or unknown	200	187	252	347	329	194	279	258
Non-U.S. citizens	2,304	2,431	2,571	2,677	2,687	2,862	2,586	2,394
Mathematical sciences	13,681	13,865	14,256	14,679	14,530	14,226	13,410	12,966
Total U.S. citizens	7,697	7,961	8,380	8,939	9,056	8,876	8,291	7,885
Black, non-Hispanic	254	264	276	331	411	412	423	422
American Indian/Alaskan Native	20	13	12	20	13	26	41	31
Asian/Pacific Islander	429	494	555	625	648	802	738	755
Hispanic	221	244	225	231	258	213	234	216
White, non-Hispanic	6,318	6,532	6,762	7,144	7,048	6,993	6,443	6,138
Other or unknown	455	414	550	588	678	430	412	323
Non-U.S. citizens	5,984	5,904	5,876	5,740	5,474	5,350	5,119	5,081
Computer sciences	15,606	16,689	16,516	17,486	17,374	16,674	16,490	17,173
Total U.S. citizens	8,616	8,742	8,426	8,852	8,985	8,731	8,610	8,392
Black, non-Hispanic	344	367	446	411	460	465	485	475
American Indian/Alaskan Native	16	18	18	25	26	11	22	20
Asian/Pacific Islander	1,111	1,188	1,191	1,387	1,505	1,702	1,652	1,741
Hispanic	198	188	194	225	217	215	256	236
White, non-Hispanic	6,265	6,451	5,936	6,129	6,018	5,924	5,726	5,437
Other or unknown	682	530	641	675	759	414	469	483
Non-U.S. citizens	6,990	7,947	8,090	8,634	8,389	7,943	7,880	8,781

See explanatory information, if any, and SOURCE at end of table.

Table 20. Full-time graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and racial/ethnic background of U.S. citizens: 1989-96

Field, citizenship, and racial/ethnic background	1989	1990	1991	1992	1993	1994	1995	1996
Agricultural sciences	9,070	9,100	9,289	9,452	9,468	9,492	9,620	9,298
Total U.S. citizens	6,393	6,215	6,405	6,590	6,661	6,680	6,866	6,725
Black, non-Hispanic	125	133	113	163	162	162	227	194
American Indian/Alaskan Native	19	17	27	31	31	27	46	37
Asian/Pacific Islander	210	212	197	174	223	211	215	221
Hispanic	253	240	236	232	256	217	221	277
White, non-Hispanic	5,601	5,466	5,727	5,811	5,828	5,913	5,932	5,816
Other or unknown	185	147	105	179	161	150	225	180
Non-U.S. citizens	2,677	2,885	2,884	2,862	2,807	2,812	2,754	2,573
Biological sciences	40,348	40,945	42,700	44,389	46,481	48,017	48,300	47,743
Total U.S. citizens	30,367	30,286	31,102	32,558	34,520	36,228	37,176	37,229
Black, non-Hispanic	884	931	997	1,119	1,348	1,369	1,450	1,513
American Indian/Alaskan Native	70	111	91	115	123	141	160	158
Asian/Pacific Islander	1,725	1,937	1,985	2,357	2,908	3,420	3,757	3,874
Hispanic	960	961	1,100	1,169	1,334	1,344	1,477	1,468
White, non-Hispanic	25,893	25,737	26,275	27,064	27,906	29,036	29,121	29,028
Other or unknown	835	609	654	734	901	918	1,211	1,188
Non-U.S. citizens	9,981	10,659	11,598	11,831	11,961	11,789	11,124	10,514
Psychology	29,348	30,618	32,258	34,162	34,782	35,288	35,222	35,302
Total U.S. citizens	28,021	29,133	30,634	32,548	33,196	33,430	33,574	33,684
Black, non-Hispanic	1,226	1,268	1,424	1,656	1,854	2,046	2,028	2,073
American Indian/Alaskan Native	128	150	180	210	214	234	255	268
Asian/Pacific Islander	635	728	749	946	1,090	1,160	1,168	1,326
Hispanic	1,235	1,411	1,587	1,648	1,610	1,505	1,944	2,076
White, non-Hispanic	23,898	24,834	25,610	26,849	27,239	27,138	26,664	26,434
Other or unknown	899	742	1,084	1,239	1,189	1,347	1,515	1,507
Non-U.S. citizens	1,327	1,485	1,624	1,614	1,586	1,858	1,648	1,618
Social sciences	45,250	48,476	50,631	54,257	55,620	56,272	56,230	56,959
Total U.S. citizens	32,433	35,354	37,380	41,020	42,932	44,001	43,928	44,223
Black, non-Hispanic	2,269	2,543	2,670	3,107	3,346	3,348	3,500	3,737
American Indian/Alaskan Native	174	200	208	254	264	288	289	332
Asian/Pacific Islander	1,229	1,287	1,328	1,708	1,935	2,223	2,319	2,374
Hispanic	1,303	1,554	1,672	1,923	2,127	2,255	2,482	2,509
White, non-Hispanic	26,104	28,371	30,108	32,625	33,740	34,367	33,324	33,104
Other or unknown	1,354	1,399	1,394	1,403	1,520	1,520	2,014	2,167
Non-U.S. citizens	12,817	13,122	13,251	13,237	12,688	12,271	12,302	12,736
Engineering, total	64,375	65,977	71,034	74,426	73,797	71,566	67,774	65,851
Total U.S. citizens	34,069	34,464	37,091	39,898	41,223	41,167	38,599	36,496
Black, non-Hispanic	943	950	1,140	1,359	1,490	1,703	1,690	1,663
American Indian/Alaskan Native	65	65	107	106	123	134	136	141
Asian/Pacific Islander	3,295	3,559	3,843	4,497	4,861	5,724	5,140	4,828
Hispanic	1,003	1,074	1,161	1,373	1,518	1,620	1,623	1,658
White, non-Hispanic	26,049	26,788	28,068	29,944	30,345	30,083	27,800	26,174
Other or unknown	2,714	2,028	2,772	2,619	2,886	1,903	2,210	2,032
Non-U.S. citizens	30,306	31,513	33,943	34,528	32,574	30,399	29,175	29,355
Chemical engineering	5,282	5,443	5,788	5,946	6,041	6,105	5,957	5,909
Total U.S. citizens	2,668	2,668	2,798	2,948	3,107	3,370	3,304	3,368
Black, non-Hispanic	60	65	95	108	115	133	134	143
American Indian/Alaskan Native	5	1	22	11	12	15	18	21
Asian/Pacific Islander	175	240	311	274	348	395	351	378
Hispanic	93	111	110	131	131	134	164	159
White, non-Hispanic	2,236	2,195	2,193	2,315	2,395	2,578	2,531	2,527
Other or unknown	99	56	67	109	106	115	106	140
Non-U.S. citizens	2,614	2,775	2,990	2,998	2,934	2,735	2,653	2,541
Civil engineering	9,964	10,128	11,328	12,454	12,458	12,641	12,248	11,791
Total U.S. citizens	5,097	5,375	6,140	7,003	7,440	7,848	7,652	7,509
Black, non-Hispanic	151	117	153	188	229	230	261	242
American Indian/Alaskan Native	14	17	20	20	26	23	27	36
Asian/Pacific Islander	324	409	459	558	601	776	760	719
Hispanic	154	182	227	277	337	354	378	452
White, non-Hispanic	4,200	4,418	5,030	5,663	5,926	6,212	5,892	5,706
Other or unknown	254	232	251	297	321	253	334	354
Non-U.S. citizens	4,867	4,753	5,188	5,451	5,018	4,793	4,596	4,282

See explanatory information, if any, and SOURCE at end of table.

Table 20. Full-time graduate students in science, engineering, and health fields in all institutions, by field, citizenship, and racial/ethnic background of U.S. citizens: 1989-96

Field, citizenship, and racial/ethnic background	1989	1990	1991	1992	1993	1994	1995	1996
Electrical engineering	18,466	18,675	19,904	20,996	20,370	19,412	18,187	17,989
Total U.S. citizens	9,723	9,652	9,976	10,577	10,428	10,467	9,382	8,714
Black, non-Hispanic	321	322	371	437	479	538	484	445
American Indian/Alaskan Native	19	18	26	26	27	23	29	27
Asian/Pacific Islander	1,351	1,513	1,498	1,766	1,690	2,147	1,889	1,830
Hispanic	299	294	331	378	419	415	385	374
White, non-Hispanic	6,900	6,839	6,853	7,116	7,003	6,701	5,893	5,420
Other or unknown	833	666	897	854	810	643	702	618
Non-U.S. citizens	8,743	9,023	9,928	10,419	9,942	8,945	8,805	9,275
Industrial engineering	4,658	4,770	5,598	6,081	5,902	5,910	5,342	5,128
Total U.S. citizens	2,426	2,374	2,760	3,076	3,209	3,180	2,863	2,506
Black, non-Hispanic	98	114	153	191	181	197	200	189
American Indian/Alaskan Native	8	7	9	14	14	9	4	8
Asian/Pacific Islander	198	174	232	336	392	359	337	285
Hispanic	120	109	103	122	144	160	146	153
White, non-Hispanic	1,808	1,802	2,000	2,160	2,161	2,293	1,921	1,727
Other or unknown	194	168	263	253	317	162	255	144
Non-U.S. citizens	2,232	2,396	2,838	3,005	2,693	2,730	2,479	2,622
Mechanical engineering	10,492	10,867	11,687	12,383	12,395	11,875	11,128	10,690
Total U.S. citizens	5,632	5,781	6,120	6,803	7,228	7,090	6,548	6,024
Black, non-Hispanic	120	151	149	199	225	283	285	298
American Indian/Alaskan Native	6	6	9	14	19	25	30	23
Asian/Pacific Islander	491	458	578	709	826	969	804	705
Hispanic	120	158	193	207	215	250	257	237
White, non-Hispanic	3,948	4,439	4,592	5,169	5,289	5,175	4,774	4,438
Other or unknown	947	539	599	505	654	388	398	323
Non-U.S. citizens	4,860	5,086	5,567	5,580	5,167	4,785	4,580	4,666
Other engineering	15,513	16,094	16,729	16,566	16,631	15,623	14,912	14,344
Total U.S. citizens	8,523	8,614	9,297	9,491	9,811	9,212	8,850	8,375
Black, non-Hispanic	193	181	219	236	261	322	326	346
American Indian/Alaskan Native	13	16	21	21	25	39	28	26
Asian/Pacific Islander	756	735	765	854	1,004	1,078	999	911
Hispanic	217	220	197	258	272	307	293	283
White, non-Hispanic	6,957	7,095	7,400	7,521	7,571	7,124	6,789	6,356
Other or unknown	387	367	695	601	678	342	415	453
Non-U.S. citizens	6,990	7,480	7,432	7,075	6,820	6,411	6,062	5,969
Total, health fields	25,813	27,431	29,866	32,099	35,649	39,081	41,895	44,304
Total U.S. citizens	22,527	23,875	26,105	28,406	31,832	35,448	38,268	40,334
Black, non-Hispanic	1,021	1,083	1,171	1,315	1,484	1,622	1,833	2,006
American Indian/Alaskan Native	108	103	140	167	167	178	199	221
Asian/Pacific Islander	889	1,041	1,222	1,392	1,744	2,007	2,301	2,695
Hispanic	1,050	1,182	1,264	1,481	1,598	1,694	1,958	2,025
White, non-Hispanic	18,721	19,910	21,495	23,264	25,807	28,594	30,294	31,775
Other or unknown	738	551	813	787	1,032	1,353	1,683	1,612
Non-U.S. citizens	3,286	3,556	3,761	3,693	3,817	3,633	3,627	3,970

NOTE: For 1991 and earlier years, permanent residents were included under "non-U.S. citizens." Beginning in 1992, permanent residents were included with U.S. citizens.

SOURCE: National Science Foundation SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering.

Table 21. Full-time graduate science, engineering, and health students without U.S. citizenship in all institutions, by detailed field: 1989-96

Field	1989	1990	1991	1992	1993	1994	1995	1996
Total, all surveyed fields	86,772	91,151	95,448	96,730	93,363	89,830	86,707	87,327
Total, science and engineering fields	83,486	87,595	91,687	93,037	89,546	86,197	83,080	83,357
Sciences, total	53,180	56,082	57,744	58,509	56,972	55,798	53,905	54,002
Physical sciences, total	11,100	11,649	11,850	11,914	11,380	10,913	10,492	10,305
Astronomy	158	187	212	219	210	259	225	212
Chemistry	5,730	6,140	6,338	6,264	6,075	5,915	5,790	5,725
Physics	5,186	5,294	5,269	5,395	5,041	4,672	4,419	4,323
Physical sciences, n.e.c.	26	28	31	36	54	67	58	45
Earth, atmos., & ocean sci., total	2,304	2,431	2,571	2,677	2,687	2,862	2,586	2,394
Atmospheric sciences	235	264	289	307	272	250	248	266
Geosciences	1,279	1,361	1,406	1,520	1,520	1,559	1,390	1,300
Oceanography	522	532	564	563	557	671	583	510
Earth, atmos., & ocean sci., n.e.c.	268	274	312	287	338	382	365	318
Mathematical sciences	5,984	5,904	5,876	5,740	5,474	5,350	5,119	5,081
Computer sciences	6,990	7,947	8,090	8,634	8,389	7,943	7,880	8,781
Agricultural sciences	2,677	2,885	2,884	2,862	2,807	2,812	2,754	2,573
Biological sciences, total	9,981	10,659	11,598	11,831	11,961	11,789	11,124	10,514
Anatomy	215	202	241	237	239	222	240	217
Biochemistry	1,509	1,625	1,717	1,721	1,742	1,689	1,572	1,444
Biology	1,700	1,779	1,864	1,891	1,829	1,732	1,687	1,679
Biometry/epidemiology	304	342	448	487	542	533	500	468
Biophysics	208	198	246	249	214	208	198	175
Botany	818	832	849	807	817	739	639	627
Cell biology	477	535	619	692	727	848	789	775
Ecology	133	151	150	133	165	161	154	143
Entomology/parasitology	291	298	335	304	321	323	332	285
Genetics	300	293	308	344	367	348	340	373
Microbio., immunology, & virology	1,070	1,150	1,193	1,141	1,229	1,246	1,129	1,027
Nutrition	971	1,046	1,117	1,076	1,197	1,099	1,116	1,022
Pathology	279	282	315	322	339	335	322	319
Pharmacology	509	570	632	680	612	627	529	556
Physiology	550	581	638	632	597	574	509	420
Zoology	269	292	314	295	261	272	228	210
Biosciences, n.e.c.	378	483	612	820	763	833	840	774
Psychology	1,327	1,485	1,624	1,614	1,586	1,658	1,648	1,618
Social sciences, total	12,817	13,122	13,251	13,237	12,688	12,271	12,302	12,736
Agricultural economics	916	930	954	995	892	832	899	804
Anthropology (cultural & social)	655	697	716	717	675	681	584	583
Economics (except agricultural)	4,495	4,635	4,779	4,845	4,694	4,579	4,631	4,904
Geography	426	432	410	426	432	398	396	398
Linguistics	1,012	1,068	1,052	952	908	898	874	883
Political science	2,727	2,753	2,817	2,803	2,764	2,639	2,675	2,960
Sociology	1,390	1,392	1,311	1,299	1,152	1,065	943	935
Sociology/anthropology	121	134	110	98	72	77	77	67
Social sciences, other	1,075	1,081	1,102	1,102	1,099	1,102	1,163	1,202
Engineering, total	30,306	31,513	33,943	34,528	32,574	30,399	29,175	29,355
Aerospace engineering	1,015	1,140	1,124	1,060	1,084	1,138	1,082	1,159
Agricultural engineering	499	469	493	463	432	441	445	406
Biomedical engineering	568	588	662	723	699	730	662	633
Chemical engineering	2,614	2,775	2,990	2,998	2,934	2,735	2,653	2,541
Civil engineering	4,867	4,753	5,188	5,451	5,018	4,793	4,596	4,282
Electrical engineering	8,743	9,023	9,928	10,419	9,942	8,945	8,805	9,275
Engineering science	557	507	590	613	573	514	418	426
Industrial/manufacturing eng.	2,232	2,396	2,838	3,005	2,693	2,730	2,479	2,622
Mechanical engineering	4,860	5,086	5,567	5,580	5,167	4,785	4,580	4,666
Metallurgical/materials eng.	1,830	1,945	1,991	2,027	1,985	1,773	1,722	1,718
Nuclear engineering	484	503	490	473	436	379	347	284
Engineering, other	2,037	2,328	2,082	1,716	1,611	1,436	1,386	1,343
Total, health fields	3,286	3,556	3,751	3,693	3,817	3,633	3,627	3,970
Clinical fields	258	296	331	382	392	369	256	245
Dental sciences	167	184	223	228	236	210	240	281
Nursing	170	199	252	215	245	282	296	263
Pharmaceutical sciences	904	959	984	974	954	871	957	1,052
Preventive medicine/community health	879	977	962	841	869	728	724	793
Speech pathology/audiology	276	289	315	327	339	335	271	291
Veterinary sciences	189	201	223	232	223	211	241	266
Other health fields	443	451	471	494	559	627	642	779

NOTE: For 1991 and earlier years, permanent residents were included under "non-U.S. citizens". Beginning in 1992, permanent residents were included with U.S. citizens.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 22. Full-time graduate students in science and engineering fields in all institutions, by field and Carnegie classification: 1989-96

Carnegie classification and field	1989	1990	1991	1992	1993	1994	1995	1996
All institutions								
Total, science and engineering fields	256,906	265,399	277,174	290,510	294,030	293,048	287,223	284,064
Sciences, total	192,531	199,422	206,140	216,084	220,233	221,482	219,449	218,213
Physical sciences	29,207	29,485	30,117	30,673	30,611	30,043	28,902	27,944
Earth, atmospheric, & ocean sciences	10,021	10,244	10,373	10,986	11,367	11,470	11,275	10,828
Mathematical sciences	13,681	13,865	14,256	14,679	14,530	14,226	13,410	12,966
Computer sciences	15,606	16,689	16,516	17,486	17,374	16,674	16,490	17,173
Agricultural sciences	9,070	9,100	9,289	9,452	9,468	9,492	9,620	9,298
Biological sciences	40,348	40,945	42,700	44,389	46,481	48,017	48,300	47,743
Psychology	29,348	30,618	32,258	34,162	34,782	35,288	35,222	35,302
Social sciences	45,250	48,476	50,631	54,257	55,620	56,272	56,230	56,959
Engineering, total	64,375	65,977	71,034	74,426	73,797	71,566	67,774	65,851
Research I:								
Total, science and engineering fields	112,370	115,111	117,875	121,824	123,931	123,434	120,156	117,617
Sciences, total	82,656	84,493	85,808	88,634	90,468	90,726	89,206	87,551
Physical sciences	14,309	14,489	14,621	14,740	14,789	14,386	13,917	13,513
Earth, atmospheric, & ocean sciences	4,289	4,278	4,231	4,412	4,500	4,546	4,495	4,202
Mathematical sciences	6,014	6,083	6,137	6,348	6,236	6,024	5,778	5,624
Computer sciences	5,788	5,842	5,870	6,002	6,049	5,986	5,856	5,941
Agricultural sciences	4,268	4,366	4,367	4,334	4,323	4,396	4,448	4,291
Biological sciences	19,812	20,147	20,705	21,314	22,317	23,028	22,996	22,581
Psychology	6,105	6,237	6,340	6,685	6,763	6,677	6,612	6,521
Social sciences	22,071	23,051	23,537	24,799	25,491	25,683	25,104	24,873
Engineering, total	29,714	30,618	32,067	33,190	33,463	32,708	30,950	30,066
Research II:								
Total, science and engineering fields	22,134	22,575	24,299	25,422	25,528	25,193	25,009	24,488
Sciences, total	16,315	16,747	17,534	18,270	18,566	18,564	18,533	18,358
Physical sciences	2,803	2,808	2,877	2,965	2,939	2,902	2,824	2,659
Earth, atmospheric, & ocean sciences	959	981	946	1,077	1,091	1,145	1,168	1,058
Mathematical sciences	1,322	1,381	1,473	1,400	1,420	1,360	1,283	1,202
Computer sciences	1,183	1,189	1,198	1,422	1,390	1,444	1,360	1,442
Agricultural sciences	1,304	1,244	1,268	1,421	1,409	1,354	1,402	1,315
Biological sciences	3,103	3,097	3,209	3,161	3,282	3,348	3,442	3,339
Psychology	2,020	2,018	2,190	2,251	2,213	2,218	2,276	2,169
Social sciences	3,621	4,029	4,373	4,573	4,822	4,793	4,838	5,174
Engineering, total	5,819	5,828	6,765	7,152	6,962	6,629	6,476	6,130
Doctorate-granting:								
Total, science and engineering fields	32,794	33,930	35,892	37,689	37,920	38,809	37,108	37,736
Sciences, total	25,835	26,960	27,971	29,552	29,979	31,036	30,004	30,524
Physical sciences	3,430	3,481	3,590	3,713	3,649	3,677	3,346	3,329
Earth, atmospheric, & ocean sciences	1,144	1,167	1,295	1,310	1,371	1,442	1,376	1,374
Mathematical sciences	1,845	1,816	1,959	2,049	2,091	2,100	1,890	1,818
Computer sciences	3,347	3,625	3,342	3,579	3,517	3,480	3,466	3,669
Agricultural sciences	322	372	355	436	399	432	403	446
Biological sciences	3,407	3,371	3,657	3,857	4,023	4,249	4,301	4,221
Psychology	6,690	6,888	6,872	7,124	7,508	7,861	7,501	7,596
Social sciences	5,650	6,240	6,901	7,484	7,421	7,795	7,721	8,071
Engineering, total	6,959	6,970	7,921	8,137	7,941	7,773	7,104	7,213

See explanatory information, if any, and SOURCE at end of table.

Table 22. Full-time graduate students in science and engineering fields in all institutions, by field and Carnegie classification: 1989-96

Carnegie classification and field	1989	1990	1991	1992	1993	1994	1995	1996
Comprehensive:								
Total, science and engineering fields	18,004	19,380	21,390	23,134	23,611	23,564	23,533	23,778
Sciences, total	15,245	16,474	17,995	19,273	19,918	20,040	20,226	20,648
Physical sciences	1,048	1,006	1,050	1,020	1,122	1,124	1,113	1,065
Earth, atmospheric, & ocean sciences	566	580	654	719	799	827	808	819
Mathematical sciences	830	866	925	965	975	1,004	881	876
Computer sciences	1,837	2,219	2,361	2,452	2,302	2,020	1,946	2,304
Agricultural sciences	565	573	655	556	631	588	706	643
Biological sciences	2,105	2,104	2,185	2,354	2,744	2,671	2,781	2,818
Psychology	5,143	5,658	6,358	7,114	7,221	7,560	7,587	7,681
Social sciences	3,154	3,468	3,807	4,093	4,124	4,246	4,404	4,442
Engineering, total	2,759	2,906	3,395	3,861	3,693	3,524	3,307	3,130
Engineering:								
Total, science and engineering fields	650	777	843	904	936	895	844	818
Sciences, total	301	377	374	387	405	367	350	370
Physical sciences	74	92	101	97	102	87	82	91
Earth, atmospheric, & ocean sciences	134	173	158	161	177	164	153	160
Mathematical sciences	16	11	17	13	18	11	8	9
Computer sciences	71	90	90	107	102	97	94	95
Agricultural sciences	0	0	0	0	0	0	0	0
Biological sciences	6	11	8	9	6	8	13	15
Psychology	0	0	0	0	0	0	0	0
Social sciences	0	0	0	0	0	0	0	0
Engineering, total	349	400	469	517	531	528	494	448
Liberal arts:								
Total, science and engineering fields	1,179	1,214	1,545	1,658	1,513	1,585	1,449	1,418
Sciences, total	1,094	1,164	1,444	1,539	1,441	1,507	1,362	1,339
Physical sciences	78	80	88	94	94	100	85	85
Earth, atmospheric, & ocean sciences	75	77	119	139	133	118	107	103
Mathematical sciences	22	24	26	32	32	34	25	25
Computer sciences	15	12	10	9	5	6	2	5
Agricultural sciences	39	59	75	70	56	52	40	38
Biological sciences	105	108	115	114	118	123	115	111
Psychology	691	735	979	1,023	953	989	928	907
Social sciences	69	69	32	58	50	85	60	59
Engineering, total	85	50	101	119	72	78	87	79
Other:								
Total, science and engineering fields	69,775	72,412	75,330	79,879	80,591	79,568	79,124	78,209
Sciences, total	51,085	53,207	55,014	58,429	59,456	59,242	59,708	59,423
Physical sciences	7,465	7,529	7,790	8,044	7,916	7,767	7,535	7,202
Earth, atmospheric, & ocean sciences	2,854	2,988	2,970	3,168	3,296	3,228	3,168	3,107
Mathematical sciences	3,632	3,684	3,719	3,872	3,758	3,693	3,545	3,411
Computer sciences	3,365	3,712	3,645	3,915	4,009	3,641	3,766	3,717
Agricultural sciences	2,572	2,486	2,569	2,635	2,650	2,670	2,621	2,565
Biological sciences	11,810	12,107	12,821	13,580	13,991	14,590	14,652	14,658
Psychology	8,702	9,082	9,519	9,965	10,124	9,983	10,318	10,428
Social sciences	10,685	11,619	11,981	13,250	13,712	13,670	14,103	14,335
Engineering, total	18,690	19,205	20,316	21,450	21,135	20,326	19,416	18,786

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 23. Full-time graduate students in science, engineering, and health fields in all institutions, by field and source of support: 1989-96

Field and source of support	1989	1990	1991	1992	1993	1994	1995	1996
Total, all surveyed fields								
Total, all sources	282,719	292,830	307,040	322,609	329,679	332,129	329,118	328,368
Federal, total	57,442	59,272	63,014	65,626	67,688	68,566	67,301	65,201
Dept. of Defense	9,140	8,868	9,128	9,247	9,750	9,449	9,339	8,801
Dept. of HHS, total	18,692	19,522	20,493	21,428	22,038	22,680	22,778	22,339
NIH	14,357	14,996	16,018	17,093	18,137	18,295	18,102	17,904
Other HHS	4,335	4,526	4,475	4,335	3,901	4,385	4,676	4,435
NSF	11,900	12,025	12,666	13,366	13,530	13,990	13,661	13,410
USDA	2,728	2,722	3,075	3,216	3,324	3,422	3,254	3,004
All other Federal	14,982	16,135	17,652	18,369	19,046	19,025	18,269	17,647
Institutional support	119,146	123,035	125,387	127,923	129,019	129,295	129,381	128,444
Other outside support, total	25,850	26,135	27,070	27,769	26,714	27,255	25,947	25,397
All other U.S.	19,140	19,604	20,427	21,309	21,233	21,537	20,402	20,171
Foreign	6,710	6,531	6,643	6,460	5,481	5,718	5,545	5,226
Self-support	80,281	84,388	91,569	101,291	106,258	107,013	106,489	109,326
Total, science and engineering								
Total, all sources	256,906	265,399	277,174	290,510	294,030	293,048	287,223	284,064
Federal, total	50,967	52,501	56,046	58,298	60,393	60,789	59,339	57,843
Dept. of Defense	8,773	8,492	8,711	8,848	9,315	9,067	9,006	8,470
Dept. of HHS, total	14,078	14,594	15,472	16,274	16,827	17,148	17,101	16,920
NIH	12,909	13,367	14,172	15,043	15,871	15,950	15,663	15,470
Other HHS	1,169	1,227	1,300	1,231	956	1,198	1,438	1,450
NSF	11,852	11,976	12,610	13,296	13,441	13,873	13,561	13,328
USDA	2,682	2,664	3,015	3,147	3,246	3,348	3,199	2,954
All other Federal	13,582	14,775	16,238	16,733	17,564	17,353	16,532	16,171
Institutional support	112,320	115,864	117,907	120,276	120,899	120,834	120,401	119,075
Other outside support, total	24,444	24,765	25,549	26,075	24,971	25,390	23,921	23,371
All other U.S.	18,214	18,699	19,367	20,075	19,933	20,130	18,906	18,575
Foreign	6,230	6,066	6,182	6,000	5,038	5,260	5,015	4,796
Self-support	69,175	72,269	77,672	85,861	87,767	86,035	83,502	83,775
Sciences, total								
Total, all sources	192,531	199,422	206,140	216,084	220,233	221,482	219,449	218,213
Federal, total	36,753	37,829	40,064	41,734	43,503	43,938	43,038	42,011
Dept. of Defense	3,946	3,779	3,840	3,895	4,176	4,350	4,196	3,932
Dept. of HHS, total	13,379	13,834	14,662	15,373	15,903	16,242	16,183	16,085
NIH	12,291	12,706	13,448	14,245	15,077	15,168	14,895	14,739
Other HHS	1,088	1,128	1,214	1,128	826	1,074	1,288	1,346
NSF	8,087	8,094	8,313	8,691	8,880	9,109	8,981	8,739
USDA	2,478	2,433	2,741	2,789	2,940	3,003	2,858	2,563
All other Federal	8,863	9,689	10,508	10,986	11,604	11,234	10,820	10,592
Institutional support	89,539	92,553	93,291	95,350	95,940	96,269	96,569	95,703
Other outside support, total	14,362	14,384	14,923	15,525	15,254	16,012	14,814	14,476
All other U.S.	10,204	10,324	10,831	11,556	11,860	12,364	11,454	11,204
Foreign	4,158	4,060	4,092	3,969	3,394	3,648	3,360	3,272
Self-support	51,877	54,656	57,862	63,475	65,536	65,263	65,028	66,023
Physical sciences								
Total, all sources	29,207	29,485	30,117	30,673	30,611	30,043	28,902	27,944
Federal, total	10,247	10,284	10,834	11,007	11,140	11,032	10,359	9,887
Dept. of Defense	1,392	1,214	1,225	1,194	1,187	1,316	1,198	1,070
Dept. of HHS, total	2,111	2,096	2,042	2,188	2,162	2,209	2,078	2,078
NIH	1,981	1,952	1,874	2,056	2,051	2,074	1,898	1,795
Other HHS	130	144	168	132	111	135	180	283
NSF	3,612	3,567	3,571	3,601	3,623	3,703	3,605	3,385
USDA	43	54	61	68	61	42	38	43
All other Federal	3,089	3,353	3,934	3,956	4,107	3,762	3,440	3,308
Institutional support	15,150	15,272	15,049	15,358	15,148	14,831	14,848	14,335
Other outside support, total	2,007	1,974	2,228	2,349	2,234	2,316	2,081	2,075
All other U.S.	1,751	1,716	1,927	2,044	1,955	2,008	1,794	1,794
Foreign	256	258	301	305	279	308	287	281
Self-support	1,803	1,955	2,006	1,959	2,089	1,864	1,614	1,647
Earth, atmospheric, & ocean sciences								
Total, all sources	10,021	10,244	10,373	10,986	11,367	11,470	11,275	10,828
Federal, total	2,895	2,991	3,119	3,436	3,652	3,630	3,472	3,275
Dept. of Defense	435	452	452	472	517	494	410	392
Dept. of HHS, total	25	34	56	49	48	37	33	49
NIH	17	21	23	43	41	36	30	30
Other HHS	8	13	33	6	7	1	3	19
NSF	1,253	1,210	1,223	1,320	1,366	1,409	1,387	1,245
USDA	43	57	69	86	64	61	65	75
All other Federal	1,139	1,238	1,319	1,509	1,657	1,629	1,577	1,514
Institutional support	4,256	4,257	4,314	4,316	4,366	4,343	4,441	4,273
Other outside support, total	990	952	974	1,006	928	1,023	968	918
All other U.S.	652	679	687	761	735	790	733	701
Foreign	338	273	287	245	193	233	235	217
Self-support	1,880	2,044	1,966	2,228	2,421	2,474	2,394	2,362

See explanatory information, if any, and SOURCE at end of table.

Table 23. Full-time graduate students in science, engineering, and health fields in all institutions, by field and source of support: 1989-96

Field and source of support	1989	1990	1991	1992	1993	1994	1995	1996
Mathematical sciences:								
Total, all sources	13,681	13,865	14,256	14,679	14,530	14,226	13,410	12,966
Federal, total	1,219	1,333	1,503	1,497	1,474	1,397	1,287	1,237
Dept. of Defense	395	367	376	386	399	372	322	351
Dept. of HHS, total	36	49	69	118	80	76	87	82
NIH	28	39	64	111	74	68	63	61
Other HHS	8	10	5	7	6	8	24	21
NSF	475	491	452	457	470	518	474	435
USDA	22	23	21	25	28	16	13	9
All other Federal	291	403	585	511	497	415	391	360
Institutional support	9,373	9,489	9,531	9,578	9,394	9,461	9,151	8,836
Other outside support, total	585	560	590	626	524	552	496	554
All other U.S.	348	317	321	356	303	333	309	347
Foreign	237	243	269	270	221	219	187	207
Self-support	2,504	2,483	2,632	2,978	3,138	2,816	2,476	2,339
Computer sciences:								
Total, all sources	15,606	16,689	16,516	17,486	17,374	15,674	16,490	17,173
Federal, total	2,324	2,409	2,533	2,661	2,918	3,070	3,175	3,105
Dept. of Defense	1,164	1,129	1,131	1,210	1,327	1,345	1,419	1,349
Dept. of HHS, total	60	71	71	104	107	103	111	113
NIH	53	62	65	101	99	95	93	80
Other HHS	7	9	6	3	8	8	18	33
NSF	777	819	896	962	1,004	1,046	1,053	1,049
USDA	7	14	8	6	7	9	13	13
All other Federal	316	376	427	379	473	567	579	581
Institutional support	5,342	5,653	5,474	5,609	5,509	5,437	5,488	5,615
Other outside support, total	1,278	1,281	1,322	1,350	1,383	1,393	1,300	1,182
All other U.S.	950	935	972	1,029	1,131	1,107	1,063	935
Foreign	328	346	350	321	252	286	237	247
Self-support	6,662	7,346	7,187	7,866	7,564	6,774	6,527	7,271
Agricultural sciences:								
Total, all sources	9,070	9,100	9,289	9,452	9,468	9,492	9,620	9,298
Federal, total	1,817	1,812	1,896	1,993	1,965	1,922	2,061	1,973
Dept. of Defense	13	18	26	18	37	35	32	38
Dept. of HHS, total	37	45	46	41	34	50	25	31
NIH	26	40	38	38	32	47	19	17
Other HHS	11	5	8	3	2	3	6	14
NSF	48	65	61	76	76	87	92	97
USDA	1,064	963	1,117	1,110	1,150	1,114	1,195	1,069
All other Federal	655	721	646	748	668	636	717	738
Institutional support	3,463	3,450	3,535	3,621	3,635	3,810	3,884	3,681
Other outside support, total	1,697	1,770	1,715	1,685	1,681	1,671	1,484	1,443
All other U.S.	1,026	1,101	1,059	1,099	1,189	1,153	1,081	1,088
Foreign	671	669	656	586	492	518	403	355
Self-support	2,093	2,068	2,143	2,153	2,187	2,089	2,191	2,201
Biological sciences:								
Total, all sources	40,348	40,945	42,700	44,389	46,481	48,017	48,300	47,743
Federal, total	13,259	13,652	14,503	15,148	16,210	16,724	16,618	16,549
Dept. of Defense	250	222	223	232	273	346	359	365
Dept. of HHS, total	9,618	9,951	10,667	11,054	11,632	11,979	12,049	11,897
NIH	9,265	9,584	10,215	10,637	11,314	11,464	11,377	11,287
Other HHS	353	367	452	417	318	515	672	610
NSF	1,253	1,212	1,282	1,347	1,382	1,382	1,407	1,494
USDA	949	963	1,062	1,083	1,222	1,289	1,090	1,071
All other Federal	1,189	1,304	1,269	1,432	1,701	1,728	1,713	1,722
Institutional support	18,446	18,868	19,267	19,753	20,028	20,712	20,816	20,424
Other outside support, total	3,433	3,536	3,735	3,787	3,864	4,138	3,888	3,734
All other U.S.	2,636	2,809	3,017	3,109	3,280	3,504	3,283	3,177
Foreign	797	727	718	678	584	634	605	557
Self-support	5,210	4,889	5,195	5,701	6,379	6,443	6,978	7,036
Psychology:								
Total, all sources	29,348	30,618	32,258	34,162	34,782	35,288	35,222	35,302
Federal, total	2,207	2,394	2,492	2,582	2,653	2,634	2,543	2,734
Dept. of Defense	113	156	159	136	163	175	175	139
Dept. of HHS, total	1,179	1,274	1,342	1,398	1,423	1,365	1,326	1,508
NIH	720	798	901	962	1,163	1,098	1,094	1,203
Other HHS	459	476	441	436	260	267	232	305
NSF	236	262	268	283	314	289	288	290
USDA	29	37	24	19	15	38	16	5
All other Federal	650	665	699	746	738	767	738	792
Institutional support	11,631	12,133	12,279	12,676	13,215	12,966	12,841	13,049
Other outside support, total	1,132	1,118	1,071	1,108	1,079	1,190	1,133	1,017
All other U.S.	1,077	1,060	1,015	1,051	1,032	1,116	1,089	976
Foreign	55	58	56	57	47	74	44	41
Self-support	14,378	14,973	16,416	17,796	17,835	18,498	18,705	18,502

See explanatory information, if any, and SOURCE at end of table.

Table 23. Full-time graduate students in science, engineering, and health fields in all institutions, by field and source of support: 1989-96

Field and source of support	1989	1990	1991	1992	1993	1994	1995	1996
Social sciences:								
Total, all sources	45,250	48,476	50,631	54,257	55,620	56,272	56,230	56,959
Federal, total	2,785	2,954	3,184	3,410	3,491	3,529	3,523	3,251
Dept. of Defense	184	221	247	247	273	267	281	225
Dept. of HHS, total	313	314	369	421	417	423	474	327
NIH	201	210	268	297	303	286	321	266
Other HHS	112	104	101	124	114	137	153	61
NSF	433	468	560	645	645	675	675	744
USDA	321	322	379	392	393	434	428	378
All other Federal	1,534	1,629	1,629	1,705	1,763	1,730	1,665	1,577
Institutional support	21,878	23,431	23,842	24,439	24,645	24,709	25,100	25,490
Other outside support, total	3,240	3,193	3,288	3,614	3,561	3,729	3,464	3,553
All other U.S.	1,764	1,707	1,833	2,107	2,235	2,353	2,102	2,186
Foreign	1,476	1,486	1,455	1,507	1,326	1,376	1,362	1,367
Self-support	17,347	18,898	20,317	22,794	23,923	24,305	24,143	24,665
Engineering, total:								
Total, all sources	64,375	65,977	71,034	74,426	73,797	71,566	67,774	65,851
Federal, total	14,214	14,672	15,982	16,564	16,890	16,851	16,361	15,832
Dept. of Defense	4,827	4,713	4,871	4,953	5,139	4,717	4,810	4,538
Dept. of HHS, total	699	760	810	901	924	906	918	835
NIH	618	661	724	798	794	782	768	731
Other HHS	81	99	86	103	130	124	150	104
NSF	3,765	3,882	4,297	4,605	4,561	4,764	4,580	4,589
USDA	204	231	274	358	306	345	341	291
All other Federal	4,719	5,086	5,730	5,747	5,960	6,119	5,712	5,579
Institutional support	22,781	23,311	24,616	24,926	24,959	24,565	23,832	23,372
Other outside support, total	10,082	10,381	10,626	10,550	9,717	9,378	9,107	8,895
All other U.S.	8,010	8,375	8,536	8,519	8,073	7,766	7,452	7,371
Foreign	2,072	2,006	2,090	2,031	1,644	1,612	1,655	1,524
Self-support	17,298	17,613	19,810	22,386	22,231	20,772	18,474	17,752
Chemical engineering:								
Total, all sources	5,282	5,443	5,788	5,946	6,041	6,105	5,957	5,909
Federal, total	1,459	1,529	1,598	1,654	1,748	1,716	1,752	1,786
Dept. of Defense	130	98	134	123	139	128	164	169
Dept. of HHS, total	87	121	132	166	141	173	163	162
NIH	87	119	128	146	119	143	136	148
Other HHS	0	2	4	20	22	30	27	14
NSF	654	679	664	699	730	749	759	777
USDA	13	27	16	38	52	54	66	34
All other Federal	575	604	652	628	686	612	600	644
Institutional support	1,976	2,105	2,282	2,308	2,340	2,420	2,278	2,154
Other outside support, total	1,278	1,241	1,228	1,170	1,059	1,145	1,080	1,113
All other U.S.	1,184	1,142	1,111	1,072	960	1,041	942	957
Foreign	94	99	117	98	99	104	138	156
Self-support	569	568	680	814	894	824	847	856
Civil engineering:								
Total, all sources	9,964	10,128	11,328	12,454	12,458	12,541	12,248	11,791
Federal, total	1,403	1,467	1,752	2,028	1,982	2,090	1,970	1,886
Dept. of Defense	280	235	273	349	328	321	290	215
Dept. of HHS, total	18	15	35	43	38	45	41	39
NIH	16	11	31	38	30	37	31	33
Other HHS	2	4	4	5	8	8	10	6
NSF	382	428	498	532	522	587	530	534
USDA	33	36	51	80	63	65	53	70
All other Federal	690	753	895	1,024	1,031	1,072	1,056	1,028
Institutional support	3,904	3,913	4,204	4,391	4,579	4,742	4,874	4,754
Other outside support, total	1,200	1,256	1,339	1,477	1,267	1,233	1,163	1,154
All other U.S.	723	826	918	1,031	972	942	875	911
Foreign	477	430	421	446	295	291	288	243
Self-support	3,457	3,492	4,033	4,558	4,630	4,576	4,241	3,997
Electrical engineering:								
Total, all sources	18,466	18,675	19,904	20,996	20,370	19,412	18,187	17,989
Federal, total	3,476	3,571	3,866	4,061	4,106	4,082	4,057	3,988
Dept. of Defense	1,675	1,646	1,644	1,700	1,764	1,664	1,706	1,651
Dept. of HHS, total	61	77	85	90	103	100	113	93
NIH	45	55	76	81	86	83	84	71
Other HHS	16	22	9	9	17	17	29	22
NSF	1,084	1,133	1,278	1,388	1,285	1,343	1,325	1,319
USDA	14	16	18	24	11	24	34	13
All other Federal	642	699	841	859	943	951	879	912
Institutional support	6,390	6,355	6,640	6,856	6,726	6,407	6,245	6,391
Other outside support, total	2,883	2,969	3,024	2,953	2,773	2,620	2,591	2,645
All other U.S.	2,389	2,443	2,492	2,450	2,336	2,218	2,162	2,264
Foreign	494	526	532	503	437	402	429	381
Self-support	5,717	5,780	6,374	7,126	6,765	6,303	5,294	4,965

See explanatory information, if any, and SOURCE at end of table.

Table 23. Full-time graduate students in science, engineering, and health fields in all institutions, by field and source of support: 1989-96

Field and source of support	1989	1990	1991	1992	1993	1994	1995	1996
Industrial engineering:								
Total, all sources	4,658	4,770	5,598	6,081	5,902	5,910	5,342	5,128
Federal, total	584	611	705	650	647	637	657	640
Dept. of Defense	281	299	281	267	249	178	189	209
Dept. of HHS, total	59	60	52	53	78	50	54	49
NIH	25	27	16	22	36	28	27	27
Other HHS	34	33	36	31	42	22	27	22
NSF	126	129	188	165	173	215	173	167
USDA	0	1	5	5	3	1	0	1
All other Federal	118	122	179	160	144	193	241	214
Institutional support	1,630	1,686	1,858	1,878	1,949	1,889	1,840	1,779
Other outside support, total	533	571	496	568	493	551	498	468
All other U.S.	387	415	362	430	404	458	420	371
Foreign	146	156	134	138	89	93	78	97
Self-support	1,911	1,902	2,539	2,985	2,813	2,833	2,347	2,241
Mechanical engineering:								
Total, all sources	10,492	10,867	11,687	12,383	12,395	11,875	11,128	10,690
Federal, total	2,485	2,532	2,730	2,790	2,999	2,946	2,777	2,602
Dept. of Defense	840	751	738	730	797	782	823	739
Dept. of HHS, total	61	69	71	87	86	80	93	76
NIH	54	68	58	77	70	71	82	63
Other HHS	7	1	13	10	16	9	11	13
NSF	632	639	732	786	812	800	743	770
USDA	28	26	29	26	9	10	4	13
All other Federal	924	1,047	1,160	1,161	1,295	1,274	1,114	1,004
Institutional support	3,854	4,043	4,287	4,400	4,231	4,086	3,909	3,954
Other outside support, total	1,542	1,599	1,686	1,618	1,561	1,573	1,601	1,459
All other U.S.	1,327	1,383	1,415	1,401	1,391	1,333	1,347	1,250
Foreign	215	216	271	217	170	240	254	209
Self-support	2,611	2,693	2,984	3,575	3,604	3,270	2,841	2,675
Other engineering:								
Total, all sources	15,513	16,094	16,729	16,566	16,631	15,623	14,912	14,344
Federal, total	4,807	4,962	5,331	5,381	5,408	5,380	5,148	4,930
Dept. of Defense	1,621	1,684	1,801	1,784	1,862	1,644	1,638	1,555
Dept. of HHS, total	413	418	435	462	478	458	454	416
NIH	391	381	415	434	453	420	408	389
Other HHS	22	37	20	28	25	38	46	27
NSF	887	874	937	1,035	1,039	1,070	1,050	1,022
USDA	116	125	155	185	168	191	184	160
All other Federal	1,770	1,861	2,003	1,915	1,861	2,017	1,822	1,777
Institutional support	5,027	5,209	5,345	5,093	5,134	5,021	4,686	4,340
Other outside support, total	2,646	2,745	2,853	2,764	2,564	2,256	2,174	2,056
All other U.S.	2,000	2,166	2,238	2,135	2,010	1,774	1,706	1,618
Foreign	646	579	615	629	554	482	468	438
Self-support	3,033	3,178	3,200	3,328	3,525	2,966	2,904	3,018
Total, health fields:								
Total, all sources	25,313	27,431	29,866	32,099	35,649	39,081	41,895	44,304
Federal, total	6,475	6,771	6,968	7,328	7,295	7,777	7,902	7,358
Dept. of Defense	367	376	417	399	435	382	333	331
Dept. of HHS, total	4,614	4,928	5,021	5,154	5,211	5,532	5,677	5,419
NIH	1,448	1,629	1,846	2,050	2,266	2,345	2,439	2,434
Other HHS	3,166	3,299	3,175	3,104	2,945	3,187	3,238	2,985
NSF	48	49	56	70	89	117	100	82
USDA	46	58	60	69	78	74	55	50
All other Federal	1,400	1,360	1,414	1,636	1,482	1,672	1,737	1,476
Institutional support	6,826	7,171	7,480	7,647	8,120	8,461	8,980	9,369
Other outside support, total	1,406	1,370	1,521	1,694	1,743	1,865	2,026	2,026
All other U.S.	926	905	1,060	1,234	1,300	1,407	1,496	1,596
Foreign	480	465	461	460	443	458	530	430
Self-support	11,106	12,119	13,897	15,430	18,491	20,978	22,987	25,551

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 24. Full-time graduate students in science, engineering, and health fields in all institutions, by field and mechanism of support: 1989-96

Field and mechanism support	1989	1990	1991	1992	1993	1994	1995	1996
Total, all surveyed fields:								
Total, all types	282,719	292,830	307,040	322,609	329,679	332,129	329,118	328,368
Fellowships	23,461	25,254	26,695	28,630	29,132	28,894	28,879	28,949
Traineeships	14,527	15,212	15,417	15,375	15,458	15,692	15,950	15,408
Research assistantships	79,059	80,746	85,175	88,030	90,156	92,011	89,939	87,653
Teaching assistantships	64,309	64,965	65,229	65,725	67,315	66,869	65,995	65,784
Other types of support	101,363	106,653	114,524	124,849	127,618	128,663	128,355	130,574
Total, science and engineering:								
Total, all types	256,906	265,399	277,174	290,510	294,030	293,048	287,223	284,064
Fellowships	21,753	23,522	24,983	26,750	27,142	26,774	26,696	26,472
Traineeships	9,739	10,064	10,466	10,051	10,296	10,344	10,540	10,308
Research assistantships	75,816	77,342	81,214	84,076	86,202	87,633	85,336	83,267
Teaching assistantships	62,002	62,597	62,746	63,221	64,792	64,068	63,162	62,763
Other types of support	87,596	91,874	97,765	106,412	105,598	104,229	101,489	101,254
Sciences, total:								
Total, all types	192,531	199,422	206,140	216,084	220,233	221,482	219,449	218,213
Fellowships	17,022	18,317	19,214	20,626	20,905	20,718	20,683	20,799
Traineeships	8,749	9,047	9,351	9,042	9,234	9,411	9,531	9,442
Research assistantships	51,223	52,043	54,438	56,536	58,271	59,551	58,292	56,753
Teaching assistantships	50,855	51,601	51,482	52,274	53,624	53,301	53,002	52,755
Other types of support	64,682	68,414	71,655	77,606	78,199	78,501	77,941	78,464
Physical sciences:								
Total, all types	29,207	29,485	30,117	30,673	30,611	30,043	28,902	27,944
Fellowships	1,964	2,254	2,660	2,837	2,729	2,430	2,351	2,203
Traineeships	583	666	793	707	757	681	677	650
Research assistantships	12,442	12,138	12,229	12,445	12,293	12,378	11,848	11,500
Teaching assistantships	11,754	11,835	11,696	11,848	12,129	11,893	11,696	11,239
Other types of support	2,464	2,592	2,739	2,836	2,703	2,661	2,330	2,352
Earth, atmospheric, & ocean sciences:								
Total, all types	10,021	10,244	10,373	10,986	11,367	11,470	11,275	10,828
Fellowships	748	797	896	894	907	865	896	871
Traineeships	112	84	93	120	153	140	131	131
Research assistantships	4,150	4,189	4,387	4,615	4,729	4,857	4,659	4,303
Teaching assistantships	2,435	2,389	2,345	2,450	2,519	2,484	2,508	2,530
Other types of support	2,576	2,785	2,652	2,907	3,059	3,124	3,081	2,993
Mathematical sciences:								
Total, all types	13,681	13,865	14,256	14,679	14,530	14,226	13,410	12,966
Fellowships	1,002	1,126	1,365	1,416	1,363	1,216	1,297	1,285
Traineeships	211	181	207	220	258	244	222	179
Research assistantships	1,304	1,335	1,356	1,410	1,436	1,534	1,451	1,296
Teaching assistantships	7,829	7,871	7,766	7,739	7,586	7,634	7,293	7,127
Other types of support	3,335	3,352	3,562	3,894	3,887	3,598	3,147	3,079
Computer sciences:								
Total, all types	15,606	16,689	16,516	17,486	17,374	16,674	16,490	17,173
Fellowships	843	955	901	884	808	908	911	930
Traineeships	133	148	135	148	229	281	227	210
Research assistantships	3,324	3,334	3,565	3,682	3,802	3,903	3,918	3,978
Teaching assistantships	3,471	3,685	3,503	3,548	3,594	3,374	3,373	3,381
Other types of support	7,835	8,567	8,412	9,224	8,941	8,208	8,061	8,674
Agricultural sciences:								
Total, all types	9,070	9,100	9,289	9,452	9,468	9,492	9,620	9,298
Fellowships	534	547	491	505	532	522	492	455
Traineeships	125	113	130	130	171	132	146	137
Research assistantships	4,730	4,755	5,002	5,174	5,239	5,385	5,377	5,172
Teaching assistantships	763	793	782	791	887	886	939	943
Other types of support	2,918	2,892	2,884	2,852	2,639	2,567	2,666	2,591
Biological sciences:								
Total, all types	40,348	40,945	42,700	44,389	46,481	48,017	42,300	47,743
Fellowships	4,474	4,674	4,688	5,058	5,234	5,523	5,374	5,308
Traineeships	4,684	4,871	5,094	4,830	4,918	5,227	5,299	5,342
Research assistantships	15,189	15,764	16,846	17,627	18,853	19,438	19,238	18,652
Teaching assistantships	8,868	8,702	8,797	8,947	9,163	9,339	9,309	9,361
Other types of support	7,133	6,934	7,275	7,927	8,313	8,490	9,080	9,080
Psychology:								
Total, all types	29,348	30,618	32,258	34,162	34,782	35,288	35,222	35,302
Fellowships	1,469	1,641	1,691	1,858	1,930	1,847	1,844	1,982
Traineeships	1,178	1,129	1,194	1,173	1,113	1,044	1,081	1,155
Research assistantships	3,846	4,051	4,235	4,304	4,557	4,655	4,585	4,747
Teaching assistantships	5,666	5,730	5,750	5,769	6,253	6,058	6,112	6,140
Other types of support	17,189	18,067	19,388	21,058	20,929	21,684	21,600	21,278

See explanatory information, if any, and SOURCE at end of table.

Table 24. Full-time graduate students in science, engineering, and health fields in all institutions, by field and mechanism of support: 1989-96

Field and mechanism support	1989	1990	1991	1992	1993	1994	1995	1996
Social sciences:								
Total, all types	45,250	48,476	50,631	54,257	55,620	56,272	56,230	56,959
Fellowships	5,988	6,323	6,522	7,174	7,402	7,407	7,518	7,765
Traineeships	1,723	1,855	1,705	1,714	1,635	1,662	1,748	1,638
Research assistantships	6,238	6,477	6,818	7,279	7,362	7,401	7,216	7,105
Teaching assistantships	10,069	10,596	10,843	11,182	11,493	11,633	11,772	12,034
Other types of support	21,232	23,225	24,743	26,908	27,728	28,169	27,976	28,417
Engineering, total:								
Total, all types	64,375	65,977	71,034	74,426	73,797	71,566	67,774	65,851
Fellowships	4,731	5,205	5,769	6,124	6,237	6,056	6,013	5,673
Traineeships	990	1,017	1,115	1,009	1,062	933	1,009	866
Research assistantships	24,593	25,299	26,776	27,540	27,931	28,082	27,044	26,514
Teaching assistantships	11,147	10,996	11,264	10,947	11,168	10,767	10,160	10,008
Other types of support	22,914	23,460	26,110	28,806	27,399	25,728	23,548	22,790
Chemical engineering:								
Total, all types	5,282	5,443	5,788	5,946	6,041	6,105	5,957	5,909
Fellowships	656	744	691	738	719	705	791	763
Traineeships	145	148	173	153	123	98	105	93
Research assistantships	2,813	2,839	2,987	3,012	3,120	3,270	3,104	3,052
Teaching assistantships	903	941	1,006	1,021	1,018	947	909	920
Other types of support	765	771	931	1,022	1,061	1,085	1,048	1,081
Civil engineering:								
Total, all types	9,964	10,128	11,328	12,454	12,458	12,641	12,248	11,791
Fellowships	624	620	677	802	904	888	918	884
Traineeships	202	211	214	219	210	191	196	178
Research assistantships	3,042	3,115	3,565	3,936	4,048	4,254	4,225	4,124
Teaching assistantships	1,707	1,652	1,667	1,648	1,818	1,901	1,846	1,788
Other types of support	4,389	4,530	5,205	5,849	5,478	5,407	5,063	4,817
Electrical engineering:								
Total, all types	18,466	18,675	19,904	20,996	20,370	19,412	18,187	17,989
Fellowships	1,222	1,262	1,424	1,502	1,475	1,503	1,446	1,388
Traineeships	162	157	187	162	191	158	156	152
Research assistantships	6,141	6,224	6,556	6,867	6,925	6,855	6,694	6,926
Teaching assistantships	3,503	3,459	3,487	3,451	3,435	3,236	3,106	3,163
Other types of support	7,438	7,573	8,250	9,014	8,344	7,660	6,785	6,360
Industrial engineering:								
Total, all types	4,658	4,770	5,598	6,081	5,902	5,910	5,342	5,128
Fellowships	211	250	260	269	281	270	299	238
Traineeships	43	36	32	27	48	32	37	14
Research assistantships	1,141	1,130	1,249	1,235	1,271	1,342	1,339	1,277
Teaching assistantships	818	854	893	891	935	933	823	783
Other types of support	2,445	2,500	3,164	3,659	3,367	3,333	2,844	2,816
Mechanical engineering:								
Total, all types	10,492	10,857	11,687	12,383	12,395	11,875	11,128	10,690
Fellowships	571	715	868	909	926	943	944	907
Traineeships	187	183	179	168	211	187	187	165
Research assistantships	4,248	4,306	4,630	4,731	4,787	4,688	4,413	4,272
Teaching assistantships	2,252	2,256	2,205	2,185	2,255	2,069	1,930	1,860
Other types of support	3,234	3,407	3,805	4,390	4,216	3,988	3,654	3,486
Other engineering:								
Total, all types	15,513	16,094	16,729	16,566	16,631	15,623	14,912	14,344
Fellowships	1,447	1,614	1,849	1,904	1,932	1,747	1,615	1,493
Traineeships	251	282	330	280	279	267	328	264
Research assistantships	7,208	7,685	7,789	7,759	7,780	7,673	7,269	6,863
Teaching assistantships	1,964	1,834	2,006	1,751	1,707	1,681	1,546	1,494
Other types of support	4,643	4,679	4,755	4,872	4,933	4,255	4,154	4,230
Total, health fields:								
Total, all types	25,813	27,431	29,866	32,099	35,649	39,081	41,895	44,304
Fellowships	1,708	1,732	1,712	1,880	1,990	2,120	2,183	2,477
Traineeships	4,788	5,148	4,951	5,324	5,162	5,348	5,410	5,100
Research assistantships	3,243	3,404	3,961	3,954	3,954	4,378	4,603	4,386
Teaching assistantships	2,307	2,368	2,483	2,504	2,523	2,801	2,833	3,021
Other types of support	13,767	14,779	16,759	18,437	22,020	24,434	26,866	29,320

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 25. Full-time graduate students in science and engineering fields in all institutions, by mechanism and source of support: 1989-96

Mechanism and source of support	1989	1990	1991	1992	1993	1994	1995	1996
Total, all types:								
Total, all sources	256,906	265,399	277,174	290,510	294,030	293,048	287,223	284,064
Federal, total	50,967	52,501	56,046	58,298	60,393	60,789	59,399	57,843
Dept. of Defense	8,773	8,492	8,711	8,848	9,315	9,067	9,006	8,470
Dept. of HHS, total	14,078	14,594	15,472	16,274	16,827	17,148	17,101	16,920
NIH	12,909	13,367	14,172	15,043	15,871	15,950	15,663	15,470
Other HHS	1,169	1,227	1,300	1,231	956	1,198	1,438	1,450
NSF	11,852	11,976	12,610	13,296	13,441	13,873	13,561	13,328
USDA	2,682	2,664	3,015	3,147	3,246	3,348	3,199	2,954
All other Federal	13,582	14,775	16,238	16,733	17,564	17,353	16,532	16,171
Institutional support	112,320	115,864	117,907	120,276	120,899	120,834	120,401	119,075
Other outside support, total	24,444	24,765	25,549	26,075	24,971	25,390	23,921	23,371
All other U.S.	18,214	18,699	19,367	20,075	19,933	20,130	18,906	18,575
Foreign	6,230	6,066	6,182	6,000	5,038	5,260	5,015	4,796
Self-support	69,175	72,269	77,672	85,861	87,767	86,035	83,502	83,775
Fellowships:								
Total, all sources	21,753	23,522	24,983	26,750	27,142	26,774	26,696	26,472
Federal, total	4,676	5,846	6,910	7,222	6,998	6,360	6,362	6,444
Dept. of Defense	392	579	677	648	627	523	470	508
Dept. of HHS, total	613	748	818	985	1,033	1,048	1,165	1,190
NIH	516	672	722	868	919	917	964	990
Other HHS	97	76	96	117	114	131	201	200
NSF	1,760	2,079	2,233	2,354	2,267	2,275	2,323	2,449
USDA	103	103	102	113	113	112	136	111
All other Federal	1,808	2,337	3,080	3,122	2,958	2,402	2,268	2,186
Institutional support	11,463	12,070	12,314	13,409	13,980	13,928	14,289	14,460
Other outside support, total	5,614	5,606	5,759	6,119	6,164	6,486	6,045	5,568
All other U.S.	3,395	3,466	3,550	3,798	3,702	4,069	3,813	3,418
Foreign	2,219	2,140	2,209	2,321	2,462	2,417	2,232	2,150
Self-support	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Traineeships:								
Total, all sources	9,739	10,064	10,466	10,051	10,296	10,344	10,540	10,308
Federal, total	4,600	4,876	5,454	5,551	5,773	5,857	5,627	5,515
Dept. of Defense	92	85	116	94	113	122	104	124
Dept. of HHS, total	3,789	4,043	4,384	4,387	4,378	4,493	4,344	4,256
NIH	3,508	3,732	4,084	4,106	4,194	4,206	3,987	3,990
Other HHS	281	311	300	281	184	287	357	266
NSF	82	45	80	104	165	258	338	431
USDA	48	53	34	28	42	37	18	24
All other Federal	589	650	840	938	1,075	947	823	680
Institutional support	4,268	4,433	4,275	3,712	3,635	3,606	4,214	4,220
Other outside support, total	871	755	737	788	888	881	699	573
All other U.S.	591	516	552	581	594	660	504	389
Foreign	280	239	185	207	294	221	195	184
Self-support	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Research assistantships:								
Total, all sources	75,816	77,342	81,214	84,076	86,202	87,633	85,336	83,267
Federal, total	37,372	37,264	39,352	41,075	43,029	43,895	42,932	41,797
Dept. of Defense	5,879	5,382	5,452	5,703	6,204	6,177	6,261	5,964
Dept. of HHS, total	9,340	9,495	9,958	10,473	10,976	11,233	11,162	11,002
NIH	8,574	8,701	9,099	9,700	10,386	10,518	10,364	10,121
Other HHS	766	794	859	773	590	715	798	881
NSF	9,854	9,692	10,144	10,628	10,769	11,145	10,600	10,223
USDA	2,407	2,386	2,761	2,896	2,964	3,073	2,946	2,707
All other Federal	9,892	10,309	11,037	11,375	12,116	12,267	11,963	11,901
Institutional support	27,121	28,381	29,426	29,953	29,900	30,639	30,148	29,158
Other outside support, total	11,323	11,697	12,436	13,048	13,273	13,099	12,256	12,312
All other U.S.	10,669	10,984	11,630	12,237	12,415	12,336	11,516	11,595
Foreign	654	713	806	811	858	763	740	717
Self-support	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Teaching assistantships:								
Total, all sources	62,002	62,597	62,746	63,221	64,792	64,068	63,162	62,763
Federal, total	427	554	428	574	776	677	646	741
Dept. of Defense	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dept. of HHS, total	116	95	87	166	162	136	113	180
NIH	110	77	74	149	156	127	106	176
Other HHS	6	18	13	17	6	9	7	4
NSF	66	84	73	112	140	107	157	117
USDA	33	44	33	28	46	49	37	42
All other Federal	212	331	235	268	428	385	339	402
Institutional support	61,064	61,534	61,810	62,106	63,432	62,781	61,978	61,400
Other outside support, total	511	509	508	541	584	610	538	622
All other U.S.	511	509	508	541	584	610	538	622
Foreign	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Self-support	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

See explanatory information, if any, and SOURCE at end of table.

Table 25. Full-time graduate students in science and engineering fields in all institutions, by mechanism and source of support: 1989-96

Mechanism and source of support	1989	1990	1991	1992	1993	1994	1995	1996
Other types of support:								
Total, all sources	87,596	91,874	97,765	106,412	105,598	104,229	101,489	101,254
Federal, total	3,892	3,961	3,902	3,876	3,817	4,000	3,832	3,346
Dept. of Defense	2,410	2,446	2,466	2,403	2,371	2,245	2,171	1,874
Dept. of HHS, total	220	213	225	263	278	238	317	292
NIH	201	185	193	220	216	182	242	193
Other HHS	19	28	32	43	62	56	75	99
NSF	90	76	80	98	100	88	143	108
USDA	91	78	85	82	81	77	62	70
All other Federal	1,081	1,148	1,046	1,030	987	1,352	1,139	1,002
Institutional support	8,404	9,446	10,082	11,096	9,952	9,880	9,772	9,837
Other outside support, total	6,125	6,198	6,109	5,579	4,062	4,314	4,383	4,296
All other U.S.	3,048	3,224	3,127	2,918	2,638	2,455	2,535	2,551
Foreign	3,077	2,974	2,982	2,661	1,424	1,859	1,848	1,745
Self-support	69,175	72,269	77,672	85,861	87,767	86,035	83,502	83,775

KEY: N/A = Not applicable

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 26. Full-time students in graduate school for the first time in science, engineering, and health fields in all institutions, by detailed field: 1989-96

Field	1989	1990	1991	1992	1993	1994	1995	1996
Total, all surveyed fields	84,567	87,429	93,172	95,832	92,798	92,221	89,441	88,923
Total, science and engineering fields	74,389	76,575	81,458	83,134	79,313	78,056	74,380	73,449
Sciences, total	54,563	56,492	58,914	60,890	58,975	58,287	56,306	55,442
Physical sciences, total	6,852	6,809	7,107	6,910	6,690	6,454	6,131	5,997
Astronomy	160	172	153	161	153	164	147	157
Chemistry	3,861	3,814	4,088	3,910	3,842	3,813	3,712	3,704
Physics	2,784	2,777	2,820	2,773	2,642	2,381	2,188	2,069
Physical sciences, n.e.c.	47	46	46	66	53	96	84	67
Earth, atmos., & ocean sci., total	2,637	2,694	2,909	3,018	2,987	3,012	2,805	2,637
Atmospheric sciences	211	247	224	235	214	224	198	210
Geosciences	1,453	1,363	1,506	1,506	1,506	1,522	1,427	1,328
Oceanography	439	452	472	501	487	518	418	370
Earth, atmos., & ocean sci., n.e.c.	534	632	707	776	780	748	762	729
Mathematical sciences	4,229	4,269	4,350	4,443	4,044	3,963	3,578	3,450
Computer sciences	5,487	5,378	5,558	5,477	4,741	4,754	4,782	4,908
Agricultural sciences	2,359	2,413	2,434	2,219	2,301	2,301	2,240	2,122
Biological sciences, total	9,969	10,220	10,676	10,890	11,114	11,376	11,413	10,832
Anatomy	238	203	248	231	199	222	252	260
Biochemistry	1,053	1,024	1,034	1,027	1,089	1,034	977	945
Biology	2,460	2,513	2,709	2,789	2,752	2,733	2,688	2,574
Biometry/epidemiology	467	440	461	603	667	657	738	671
Biophysics	125	129	157	145	143	149	153	155
Botany	539	508	548	548	517	483	443	443
Cell biology	486	563	608	655	697	761	717	743
Ecology	155	187	190	212	250	285	308	245
Entomology/parasitology	199	220	230	216	239	206	184	202
Genetics	303	292	312	296	342	345	344	387
Microbio., immunology, & virology	975	955	900	873	845	906	910	848
Nutrition	812	850	818	764	836	795	854	825
Pathology	255	241	274	268	324	334	296	291
Pharmacology	477	538	542	550	513	530	498	420
Physiology	590	645	596	589	616	649	811	725
Zoology	422	407	464	393	379	348	356	327
Biosciences, n.e.c.	413	505	585	731	706	939	884	771
Psychology	8,516	8,925	9,457	10,172	9,686	9,530	9,241	9,133
Social sciences, total	14,514	15,784	16,423	17,761	17,412	16,897	16,116	16,363
Agricultural economics	612	609	623	683	570	533	492	436
Anthropology (cultural & social)	1,055	1,122	1,271	1,289	1,309	1,331	1,247	1,243
Economics (except agricultural)	2,516	2,822	2,893	3,007	2,837	2,793	2,605	2,466
Geography	762	769	827	886	999	959	836	870
Linguistics	655	712	675	650	611	612	594	620
Political science	5,213	5,775	6,121	6,714	6,567	6,131	5,916	5,859
Sociology	1,466	1,534	1,550	1,774	1,732	1,548	1,503	1,511
Sociology/anthropology	199	237	160	202	200	229	147	210
Social sciences, other	2,036	2,204	2,303	2,556	2,587	2,761	2,776	3,148
Engineering, total	19,826	20,083	22,544	22,244	20,338	19,769	18,074	18,007
Aerospace engineering	982	933	1,125	1,053	963	793	650	687
Agricultural engineering	205	205	207	193	161	193	177	183
Biomedical engineering	451	476	516	599	601	566	592	572
Chemical engineering	1,338	1,404	1,517	1,480	1,520	1,461	1,419	1,470
Civil engineering	3,404	3,692	4,210	4,331	4,019	4,194	3,825	3,845
Electrical engineering	5,768	5,715	6,243	6,112	5,485	5,452	4,975	4,859
Engineering science	331	259	312	347	316	313	275	273
Industrial/manufacturing eng.	1,739	1,719	2,045	1,926	1,647	1,721	1,523	1,591
Mechanical engineering	3,306	3,243	3,771	3,820	3,514	3,218	2,832	2,785
Metallurgical/materials eng.	902	934	997	997	871	842	805	777
Nuclear engineering	292	294	260	283	258	208	187	182
Engineering, other	1,108	1,209	1,341	1,103	983	808	815	783
Total, health fields	10,178	10,854	11,714	12,698	13,485	14,165	15,061	15,474
Clinical fields	572	584	787	836	795	780	811	885
Dental sciences	368	332	339	410	421	405	373	386
Nursing	2,236	2,229	2,407	2,391	2,420	2,615	2,685	2,653
Pharmaceutical sciences	516	538	557	480	481	489	463	521
Preventive medicine/community health	2,031	2,163	1,939	2,146	2,299	2,204	2,587	2,300
Speech pathology/audiology	2,350	2,479	2,897	3,187	3,328	3,519	3,615	3,911
Veterinary sciences	153	174	152	155	138	158	157	119
Other health fields	1,952	2,355	2,636	3,093	3,603	3,995	4,370	4,699

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 27. Graduate students in science, engineering, and health fields in all institutions, by detailed field, citizenship, and racial/ethnic background of U.S. citizens: 1996

Field	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Total, all surveyed fields	494,526	22,996	1,910	29,983	17,851	297,331	21,481	102,974
Total, science and engineering fields	415,570	19,084	1,541	25,976	14,653	238,198	17,981	98,137
Sciences, total	312,347	16,190	1,307	17,526	11,718	189,119	13,400	63,087
Physical sciences, total	32,342	986	60	1,742	743	16,741	886	11,184
Astronomy	874	14	2	38	13	549	42	216
Chemistry	19,345	679	45	1,141	505	10,210	484	6,281
Physics	11,728	280	13	542	216	5,696	351	4,630
Physical sciences, n.e.c.	395	13	0	21	9	286	9	57
Earth, atmos., & ocean sci., total	15,274	223	65	411	382	10,950	478	2,765
Atmospheric sciences	1,080	15	3	52	12	703	14	281
Geosciences	7,323	70	31	145	144	5,224	252	1,457
Oceanography	2,598	33	12	80	103	1,742	71	557
Earth, atmos., & ocean sci., n.e.c.	4,273	105	19	134	123	3,281	141	470
Mathematical sciences, total	18,015	711	41	1,225	425	9,201	651	5,761
Mathematics & applied mathematics	14,970	639	36	947	376	7,679	595	4,698
Statistics	3,045	72	5	278	49	1,522	56	1,063
Computer sciences	34,592	1,278	53	4,277	701	14,443	2,003	11,837
Agricultural sciences	11,914	268	49	281	367	7,732	269	2,948
Biological sciences, total	58,127	2,010	200	4,465	1,847	36,327	1,790	11,488
Anatomy	1,111	38	4	111	29	684	20	225
Biochemistry	5,265	116	14	613	110	2,784	114	1,514
Biology	14,635	736	62	883	623	9,667	670	1,994
Biometry/epidemiology	3,001	145	9	324	123	1,740	97	563
Biophysics	833	18	0	109	14	481	36	175
Botany	2,504	64	4	90	55	1,530	54	707
Cell biology	3,896	81	8	346	107	2,477	59	818
Ecology	1,615	17	3	37	51	1,285	60	162
Entomology/parasitology	1,234	16	2	40	43	791	24	318
Genetics	1,729	32	4	119	34	1,108	45	387
Microbio., immunology, & virology	4,963	171	14	431	164	2,996	106	1,081
Nutrition	4,859	176	14	294	158	2,934	127	1,156
Pathology	1,656	30	9	138	39	1,060	50	330
Pharmacology	2,652	105	8	255	76	1,593	46	569
Physiology	2,377	95	9	318	60	1,390	57	448
Zoology	1,910	18	18	62	39	1,531	13	229
Biosciences, n.e.c.	3,887	152	18	295	122	2,276	212	812
Psychology, total	53,353	3,460	363	1,785	3,009	39,427	3,330	1,979
Psychology, general	16,917	1,428	119	584	894	12,472	748	672
Clinical psychology	12,761	650	117	494	839	9,877	481	303
Psychology, n.e.c.	23,675	1,382	127	707	1,276	17,078	2,101	1,004
Social sciences, total	88,730	7,254	476	3,340	4,244	54,298	3,993	15,125
Agricultural economics	2,117	62	5	53	60	999	38	900
Anthropology (cultural & social)	7,767	249	107	240	338	5,875	280	678
Economics (except agricultural)	12,080	371	16	536	310	4,935	391	5,521
Geography	4,331	109	18	131	90	3,321	180	482
History and philosophy of science	409	10	0	18	8	312	11	50
Linguistics	3,156	43	4	181	131	1,689	106	1,002
Political science	33,342	3,639	153	1,155	1,900	21,024	1,923	3,548
Sociology	9,428	1,018	61	441	518	5,971	289	1,130
Sociology/anthropology	923	118	8	11	28	636	35	87
Social sciences, n.e.c.	15,177	1,635	104	574	861	9,536	740	1,727
Engineering, total	103,223	2,894	234	8,450	2,935	49,079	4,581	35,050
Aerospace engineering	3,208	47	5	159	62	1,577	85	1,273
Agricultural engineering	1,012	17	1	57	19	427	19	472
Biomedical engineering	2,732	84	6	284	60	1,519	74	705
Chemical engineering	7,373	189	30	482	200	3,381	223	2,868
Civil engineering	18,528	491	48	1,254	712	9,983	775	5,265
Electrical engineering	29,736	775	51	3,540	792	11,769	1,447	11,362
Engineering science	1,751	40	3	153	55	942	65	493
Industrial/manufacturing eng.	12,399	520	21	736	410	6,643	737	3,332
Mechanical engineering	15,509	417	35	1,073	383	7,461	657	5,483
Metallurgical/materials eng.	4,713	101	8	286	89	2,237	93	1,899
Mining engineering	371	0	1	19	4	164	49	134
Nuclear engineering	980	16	3	46	20	571	14	310
Petroleum engineering	562	2	1	44	13	141	0	361
Engineering, n.e.c.	4,349	195	21	317	116	2,264	343	1,093

See explanatory information, if any, and SOURCE at end of table.

Table 27. Graduate students in science, engineering, and health fields in all institutions, by detailed field, citizenship, and racial/ethnic background of U.S. citizens: 1996

Field	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Total, health fields	78,956	3,912	369	4,007	3,198	59,133	3,500	4,837
Medical fields, total	15,341	987	67	1,588	932	9,410	670	1,687
Anesthesiology	754	45	5	23	16	526	136	3
Cardiology	18	0	0	2	0	5	0	11
Oncology/cancer research	185	1	1	21	8	98	0	56
Endocrinology	46	1	0	7	2	13	1	22
Gastroenterology	0	0	0	0	0	0	0	0
Hematology	3	0	0	0	0	3	0	0
Neurology	1,632	39	8	159	59	1,067	33	267
Obstetrics and gynecology	4	0	0	0	0	1	0	3
Ophthalmology	33	0	0	16	0	13	0	4
Otorhinolaryngology	0	0	0	0	0	0	0	0
Pediatrics	275	28	1	14	10	190	14	18
Preventive medicine/community health	10,564	816	49	1,045	752	6,338	416	1,148
Psychiatry	218	9	1	5	3	185	0	15
Pulmonary disease	0	0	0	0	0	0	0	0
Radiology	285	4	1	42	14	175	1	48
Surgery	167	6	1	16	4	134	1	5
Clinical medicine, n.e.c.	1,157	38	0	238	64	662	68	87
Other health fields, total	63,615	2,925	302	2,419	2,266	49,723	2,830	3,150
Dental sciences	1,291	32	3	104	70	758	16	308
Nursing	27,467	1,463	149	815	865	22,571	1,214	390
Pharmaceutical sciences	2,975	121	1	231	103	1,261	106	1,152
Speech pathology/audiology	12,973	476	58	255	451	10,910	465	358
Veterinary sciences	946	37	4	25	25	552	16	287
Health related, n.e.c.	17,963	796	87	989	752	13,671	1,013	655

NOTE: For 1991 and earlier years, permanent residents were included under "non-U.S. citizens". Beginning in 1992, permanent residents were included with U.S. citizens.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 28. Male graduate students in science, engineering, and health fields in all institutions, by detailed field, citizenship, and racial/ethnic background of U.S. citizens: 1996

Field	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Total, all surveyed fields	271,857	8,988	865	17,294	8,481	151,337	11,395	73,497
Total, science and engineering fields	253,738	8,264	769	15,972	7,680	139,423	10,615	71,015
Sciences, total	168,767	6,313	578	9,303	5,414	98,960	6,812	41,387
Physical sciences, total	23,294	550	42	1,095	455	12,373	635	8,144
Astronomy	647	7	1	23	10	410	29	167
Chemistry	12,502	336	31	629	269	6,867	316	4,054
Physics	9,919	202	10	434	172	4,925	285	3,891
Physical sciences, n.e.c.	226	5	0	9	4	171	5	32
Earth, atmos., & ocean sci., total	9,760	116	36	250	234	6,839	293	1,992
Atmospheric sciences	844	8	2	36	10	583	7	198
Geosciences	4,973	41	17	96	99	3,426	156	1,138
Oceanography	1,539	19	7	48	57	977	41	390
Earth, atmos., & ocean sci., n.e.c.	2,404	48	10	70	68	1,853	89	266
Mathematical sciences	11,794	368	24	702	266	5,910	425	4,099
Computer sciences	25,802	718	39	2,841	524	11,412	1,486	8,782
Agricultural sciences	7,502	131	23	142	203	4,734	168	2,101
Biological sciences, total	29,360	725	93	2,257	852	18,290	943	6,200
Anatomy	586	12	1	58	11	360	10	134
Biochemistry	2,982	51	10	330	57	1,616	77	841
Biology	7,511	277	26	428	302	5,080	355	1,043
Biometry/epidemiology	1,227	51	1	127	44	683	37	284
Biophysics	589	12	0	82	11	338	23	123
Botany	1,394	22	1	52	34	821	29	435
Cell biology	2,071	38	3	193	55	1,323	31	428
Ecology	847	10	0	18	26	660	37	96
Entomology/parasitology	810	6	1	24	28	514	17	220
Genetics	828	12	3	58	17	476	28	234
Microbio., immunology, & virology	2,506	62	8	219	70	1,500	60	587
Nutrition	1,231	38	0	81	27	604	29	452
Pathology	847	7	5	75	18	516	31	195
Pharmacology	1,366	38	5	118	33	859	21	292
Physiology	1,396	30	6	203	27	838	28	264
Zoology	1,091	6	12	33	21	879	5	135
Biosciences, n.e.c.	2,078	53	11	158	71	1,223	125	437
Psychology	15,460	816	112	471	830	11,612	909	710
Social sciences, total	45,795	2,889	209	1,545	2,050	27,790	1,953	9,359
Agricultural economics	1,407	34	3	28	39	644	28	631
Anthropology (cultural & social)	3,120	82	44	87	142	2,337	104	324
Economics (except agricultural)	8,297	212	9	332	210	3,360	301	3,873
Geography	2,770	74	13	60	60	2,129	116	318
Linguistics	1,133	12	2	55	39	618	25	382
Political science	17,675	1,448	74	541	933	11,550	936	2,193
Sociology	3,643	361	20	172	196	2,190	121	583
Sociology/anthropology	382	43	6	6	11	250	16	50
Social sciences, other	7,368	623	38	264	420	4,712	306	1,005
Engineering, total	84,971	1,951	191	6,669	2,266	40,463	3,803	29,628
Aerospace engineering	2,856	39	5	140	53	1,379	73	1,167
Agricultural engineering	802	11	1	45	17	341	17	370
Biomedical engineering	1,999	38	5	201	42	1,109	63	541
Chemical engineering	5,731	93	22	345	130	2,678	176	2,287
Civil engineering	14,228	330	38	903	508	7,575	592	4,282
Electrical engineering	25,607	608	46	2,870	671	10,452	1,254	9,706
Engineering science	1,456	28	3	121	49	788	53	414
Industrial eng./manufacturing eng.	9,685	284	18	562	294	5,145	605	2,777
Mechanical engineering	13,873	327	28	910	323	6,695	599	4,991
Metallurgical/materials eng.	3,653	56	7	227	58	1,702	75	1,528
Nuclear engineering	827	7	2	39	18	487	12	262
Engineering, other	4,254	130	16	306	103	2,112	284	1,303

See explanatory information, if any, and SOURCE at end of table.

Table 28. Male graduate students in science, engineering, and health fields in all institutions, by detailed field, citizenship, and racial/ethnic background of U.S. citizens: 1996

Field	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Total, health fields	18,119	724	96	1,322	801	11,914	780	2,482
Clinical fields	1,407	43	3	201	52	853	100	155
Dental sciences	831	13	2	63	43	518	9	183
Nursing	1,771	57	17	47	101	1,425	81	43
Pharmaceutical sciences	1,564	36	0	115	38	682	55	638
Preventive medicine/community health	4,253	256	26	405	222	2,490	160	694
Speech pathology/audiology	1,042	48	9	26	41	776	42	100
Veterinary sciences	505	13	2	13	11	273	11	182
Other health fields	6,746	258	37	452	293	4,897	322	487

KEY: n.e.c. Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 29. Female graduate students in science, engineering, and health fields in all institutions, by detailed field, citizenship, and racial/ethnic background of U.S. citizens: 1996

Field	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Total, all surveyed fields	222,669	14,008	1,045	12,689	9,370	145,994	10,086	29,477
Total, science and engineering fields	161,832	10,820	772	10,004	6,973	98,775	7,366	27,122
Sciences, total	143,560	9,877	729	8,223	6,304	90,159	6,588	21,700
Physical sciences, total	9,048	436	18	647	288	4,368	251	3,040
Astronomy	227	7	1	15	3	139	13	49
Chemistry	6,843	343	14	512	236	3,343	168	2,227
Physics	1,809	78	3	108	44	771	66	739
Physical sciences, n.e.c.	169	8	0	12	5	115	4	25
Earth, atmos., & ocean sci., total	5,514	107	29	161	148	4,111	185	773
Atmospheric sciences	236	7	1	16	2	120	7	83
Geosciences	2,350	29	14	49	45	1,798	96	319
Oceanography	1,059	14	5	32	46	765	30	167
Earth, atmos., & ocean sci., n.e.c.	1,869	57	9	64	55	1,428	52	204
Mathematical sciences	6,221	343	17	523	159	3,291	226	1,662
Computer sciences	8,790	560	14	1,436	177	3,031	517	3,055
Agricultural sciences	4,412	137	26	139	164	2,998	101	847
Biological sciences, total	28,767	1,285	107	2,208	995	18,037	847	5,288
Anatomy	525	26	3	53	18	324	10	91
Biochemistry	2,283	65	4	283	53	1,168	37	673
Biology	7,124	459	36	455	321	4,587	315	951
Biometry/epidemiology	1,774	94	8	197	79	1,057	60	279
Biophysics	244	6	0	27	3	143	13	52
Botany	1,110	42	3	38	21	709	25	272
Cell biology	1,825	43	5	153	52	1,154	28	390
Ecology	768	7	3	19	25	625	23	66
Entomology/parasitology	424	10	1	16	15	277	7	98
Genetics	901	20	1	61	17	632	17	153
Microbio., immunology, & virology	2,457	109	6	212	94	1,496	46	494
Nutrition	3,628	138	14	213	131	2,330	98	704
Pathology	809	23	4	63	21	544	19	135
Pharmacology	1,286	67	3	137	43	734	25	277
Physiology	981	65	3	115	33	552	29	184
Zoology	819	12	6	29	18	652	8	94
Biosciences, n.e.c.	1,809	99	7	137	51	1,053	87	375
Psychology	37,893	2,644	251	1,314	2,179	27,815	2,421	1,269
Social sciences, total	42,935	4,365	267	1,795	2,194	26,508	2,040	5,766
Agricultural economics	710	28	2	25	21	355	10	269
Anthropology (cultural & social)	4,647	167	63	153	196	3,538	176	354
Economics (except agricultural)	3,783	159	7	204	100	1,575	90	1,648
Geography	1,561	35	5	71	30	1,192	64	164
Linguistics	2,023	31	2	126	92	1,071	81	620
Political science	15,667	2,191	79	614	967	9,474	987	1,355
Sociology	5,785	657	41	269	322	3,781	168	547
Sociology/anthropology	541	75	2	5	17	386	19	37
Social sciences, other	8,218	1,022	66	328	449	5,136	445	772
Engineering, total	18,252	943	43	1,781	669	8,616	778	5,422
Aerospace engineering	352	8	0	19	9	198	12	106
Agricultural engineering	210	6	0	12	2	86	2	102
Biomedical engineering	733	46	1	83	18	410	11	164
Chemical engineering	1,642	96	8	137	70	703	47	581
Civil engineering	4,300	161	10	351	204	2,408	183	983
Electrical engineering	4,129	167	5	670	121	1,317	193	1,656
Engineering science	295	12	0	32	6	154	12	79
Industrial eng./manufacturing eng.	2,714	236	3	174	116	1,498	132	555
Mechanical engineering	1,636	90	7	163	60	766	58	492
Metallurgical/materials eng.	1,060	45	1	59	31	535	18	371
Nuclear engineering	153	9	1	7	2	84	2	48
Engineering, other	1,028	67	7	74	30	457	108	285

See explanatory information, if any, and SOURCE at end of table.

Table 29. Female graduate students in science, engineering, and health fields in all institutions, by detailed field, citizenship, and racial/ethnic background of U.S. citizens: 1996

Field	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Total, health fields	60,837	3,188	273	2,685	2,397	47,219	2,720	2,355
Clinical fields	1,738	89	7	183	69	1,152	121	117
Dental sciences	460	19	1	41	27	240	7	125
Nursing	25,696	1,406	132	768	764	21,146	1,133	347
Pharmaceutical sciences	1,411	85	1	116	65	579	51	514
Preventive medicine/community health	6,311	560	23	640	530	3,848	256	454
Speech pathology/audiology	11,931	428	49	229	410	10,134	423	258
Veterinary sciences	441	24	2	12	14	279	5	105
Other health fields	12,849	577	58	696	518	9,841	724	435

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 30. Graduate science students in all institutions, by geographic division, State, institution, and citizenship, and by racial/ethnic background of U.S. citizens: 1996

Division, State, and institution	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Total, all institutions	312,347	16,190	1,307	17,526	11,718	189,119	13,400	63,087
New England	21,866	519	48	1,079	444	12,158	1,775	5,843
Connecticut	4,842	141	5	203	83	3,015	286	1,109
Central Connecticut State University	54	4	0	3	1	42	1	3
Connecticut College	21	0	0	1	0	20	0	0
Hartford Graduate Center, The	296	0	0	20	5	212	47	12
Quinnipiac College	0	0	0	0	0	0	0	0
Southern Connecticut State University	352	30	0	11	16	264	26	5
St. Joseph College	93	3	0	1	0	88	0	1
Trinity College	34	0	0	1	1	30	2	0
University of Bridgeport	87	0	0	5	3	17	0	62
University of Connecticut	1,556	30	3	44	32	975	10	462
University of Hartford	244	11	1	6	3	215	2	6
University of New Haven	593	27	0	26	6	443	34	57
Wesleyan University	120	7	0	3	0	62	1	47
Western Connecticut State University	23	0	0	1	0	20	0	2
Yale University	1,369	29	1	81	16	627	163	452
Maine	520	1	2	42	4	324	129	18
University of Maine	520	1	2	42	4	324	129	18
University of New England	0	0	0	0	0	0	0	0
Massachusetts	13,675	333	36	755	320	6,861	1,281	4,089
American International College	122	2	0	0	0	109	0	11
Anna Maria College	77	0	0	1	0	76	0	0
Assumption College	46	0	0	0	0	40	6	0
Boston College	495	19	0	20	8	326	3	119
Boston University	2,078	24	3	103	36	813	463	636
Brandeis University	565	9	0	36	15	291	2	212
Bridgewater State College	70	1	0	2	0	55	8	4
Clark University	320	1	0	6	2	142	34	135
Emerson College	0	0	0	0	0	0	0	0
Framingham State College	35	0	0	0	0	28	2	5
Harvard University	2,916	106	19	222	109	1,478	147	835
MGH Institute of Health Professions	0	0	0	0	0	0	0	0
Mass College of Pharmacy/Allied Health	20	0	0	1	1	0	1	17
Massachusetts Institute of Technology	1,850	58	3	149	54	946	29	611
Mount Holyoke College	5	0	0	0	0	5	0	0
Northeastern University	816	18	2	11	7	163	280	335
Salem State College	9	0	0	0	0	9	0	0
Smith College	7	0	0	0	1	4	0	2
Tufts University	693	17	1	35	19	477	4	140
University of Massachusetts	2,202	57	4	89	47	1,151	204	650
University of Massachusetts Dartmouth	113	0	2	6	3	66	0	36
University of Massachusetts Lowell	884	20	2	52	14	471	96	229
Western New England College	0	0	0	0	0	0	0	0
Williams College	28	0	0	0	0	0	0	28
Woods Hole Oceanographic Institution	112	0	0	6	3	73	0	30
Worcester Polytechnic Institute	202	1	0	16	1	129	1	54
Worcester State College	10	0	0	0	0	9	1	0
New Hampshire	990	6	2	24	11	700	71	176
Dartmouth College	283	3	2	12	2	205	0	59
Rivier College	70	0	0	3	0	34	28	5
University of New Hampshire	637	3	0	9	9	461	43	112
Rhode Island	1,346	27	1	45	18	842	8	405
Brown University	641	17	1	23	13	334	5	248
Rhode Island College	29	0	0	1	0	28	0	0
University of Rhode Island	676	10	0	21	5	480	3	157
Vermont	493	11	2	10	8	416	0	46
Goddard College	28	1	0	0	0	24	0	3

See explanatory information, if any, and SOURCE at end of table.

Table 30. Graduate science students in all institutions, by geographic division, State, institution, and citizenship, and by racial/ethnic background of U.S. citizens: 1996

Division, State, and institution	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Vermont, continued								
Marlboro College	1	0	0	0	0	1	0	0
Middlebury College	0	0	0	0	0	0	0	0
University of Vermont	464	10	2	10	8	391	0	43
Middle Atlantic	52,957	2,687	105	3,376	1,577	29,259	3,773	12,180
New Jersey	7,699	309	10	604	239	3,975	647	1,915
College of New Jersey, The	22	0	0	0	2	19	1	0
Drew University	0	0	0	0	0	0	0	0
Fairleigh Dickinson University	829	16	1	24	16	573	20	179
Kean College of New Jersey	341	42	0	13	19	245	21	1
Monmouth University	68	1	0	20	1	16	21	9
Montclair State University	448	15	0	39	22	279	44	49
New Jersey Institute of Technology	803	23	1	117	30	133	207	292
Princeton University	944	31	2	51	31	482	12	335
Rutgers the State Univ of New Jersey	2,973	141	2	183	70	1,651	83	843
Seton Hall University	577	23	4	36	18	250	234	12
Stevens Institute of Technology	438	7	0	80	13	203	2	133
Univ of Med and Dentistry of New Jersey	197	9	0	34	12	82	2	58
William Paterson College	59	1	0	7	5	42	0	4
New York	31,459	1,862	62	2,019	1,130	16,434	2,791	7,161
Adelphi University	287	9	1	10	11	182	63	11
Albany Medical College	93	1	0	18	2	58	0	14
Alfred University	85	1	0	1	2	81	0	0
CUNY Bernard Baruch College	398	78	0	40	46	79	98	57
CUNY Brooklyn College	393	91	0	70	14	129	66	23
CUNY City College	620	57	0	95	37	184	16	231
CUNY College of Staten Island	75	1	0	21	0	30	23	0
CUNY Graduate School and Univ Center	1,398	63	1	68	55	753	15	443
CUNY Herbert H. Lehman College	70	14	0	17	14	11	5	9
CUNY Hunter College	203	16	0	8	10	105	29	35
CUNY John Jay College of Crim Justice	614	55	0	2	18	507	14	18
CUNY Mt. Sinai School of Medicine	178	13	0	4	3	75	65	18
CUNY Queens College	486	56	1	68	34	187	62	78
Clarkson University	50	0	0	0	0	25	0	35
College of New Rochelle	181	18	3	1	12	122	25	0
College of St Rose	141	2	0	2	0	121	14	2
Columbia Univ in the City of New York	1,764	28	4	172	31	817	47	665
Cooper Union	0	0	0	0	0	0	0	0
Cornell University	2,686	65	11	140	62	1,359	21	1,028
Fordham University	472	12	0	21	26	260	99	54
Hofstra University	335	3	1	2	2	109	218	0
Iona College	258	7	0	17	6	91	137	0
Ithaca College	0	0	0	0	0	0	0	0
Long Island University	1,067	196	1	44	83	500	111	132
Manhattan College	14	1	0	2	0	10	0	1
Marist College	230	3	0	18	3	202	4	0
New School for Social Research	1,031	107	2	30	53	488	95	256
New York Institute of Technology	554	46	0	74	26	236	1	171
New York Medical College	238	7	0	22	5	122	37	45
New York University	2,886	199	3	263	107	1,290	256	768
Niagara University	19	0	0	0	1	10	0	8
Pace University	829	47	0	53	33	303	344	49
Polytechnic University	477	19	0	78	12	200	132	33
Pratt Institute	0	0	0	0	0	0	0	0
Rensselaer Polytechnic Institute	456	16	0	11	7	310	0	112
Rochester Institute of Technology	385	5	0	18	1	254	14	93
Russell Sage College	137	6	0	0	0	80	51	0
SUNY Health Science Center at Syracuse	68	1	0	5	0	43	0	19
SUNY College at Brockport	232	13	0	0	1	218	0	0
SUNY College at Buffalo	21	0	0	0	1	13	1	6
SUNY College at Cortland	0	0	0	0	0	0	0	0
SUNY College at Fredonia	40	2	0	0	1	37	0	0
SUNY College at Geneseo	3	0	0	1	0	2	0	0
SUNY College at Oneonta	8	0	0	0	0	7	1	0

See explanatory information, if any, and SOURCE at end of table.

Table 30. Graduate science students in all institutions, by geographic division, State, institution, and citizenship, and by racial/ethnic background of U.S. citizens: 1996

Division, State, and institution	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
New York, continued:								
SUNY College at Oswego	127	9	0	0	3	114	0	1
SUNY College at Plattsburgh	20	0	0	0	0	20	0	0
SUNY College at Potsdam	0	0	0	0	0	0	0	0
SUNY College of Env Science and Forestry	310	2	1	2	7	238	0	60
SUNY College of Optometry	0	0	0	0	0	0	0	0
SUNY Health Science Center at Brooklyn	76	3	0	24	1	21	0	27
SUNY Inst of Technology at Utica-Rome	54	3	1	1	1	42	3	3
SUNY at Albany	2,038	97	6	34	76	1,169	305	351
SUNY at Binghamton	845	39	3	28	30	432	87	226
SUNY at Buffalo	1,645	47	5	93	28	1,029	9	434
SUNY at New Paltz	119	2	0	17	1	62	13	24
SUNY at Stony Brook	1,651	49	5	125	37	802	12	621
Saint John's University	469	39	2	28	35	304	11	50
Sarah Lawrence College	60	1	0	1	0	48	0	10
St. Bonaventure University	3	0	0	0	0	3	0	0
Syracuse University	1,036	46	2	30	11	552	48	347
Teachers College, Columbia University	1,842	229	7	134	121	945	234	172
The Rockefeller University	93	3	0	14	3	27	1	45
Union College	27	0	0	3	0	23	0	1
University of Rochester	951	11	2	54	15	583	4	282
Vassar College	1	0	0	0	0	1	0	0
Wagner College	21	0	0	2	1	18	0	0
Yeshiva University	579	24	0	33	41	388	0	93
Pennsylvania	13,799	516	33	753	208	8,850	335	3,104
Allegheny Univ. of the Health Sciences	482	20	0	40	8	303	68	43
Bloomsburg University of Pennsylvania	16	0	0	0	1	14	0	1
Bryn Mawr College	114	2	1	3	1	97	3	7
Bucknell University	23	0	0	0	0	21	0	2
California University of Pennsylvania	189	6	1	0	1	176	0	5
Carnegie-Mellon University	1,125	54	2	86	21	372	39	551
Clarion University of Pennsylvania	24	0	0	0	0	24	0	0
Drexel University	657	36	4	36	5	387	54	135
Duquesne University	393	6	0	0	3	332	3	49
East Stroudsburg Univ of Pennsylvania	98	1	0	1	2	91	0	3
Edinboro University of Pennsylvania	128	2	0	1	1	122	0	2
Gannon University	92	3	0	0	1	88	0	0
Indiana University of Pennsylvania	296	15	0	12	10	231	0	28
Kutztown University of Pennsylvania	110	2	0	2	1	104	0	1
Lehigh University	491	9	0	19	2	321	15	125
Mansfield University of Pennsylvania	11	0	0	0	0	10	0	1
Marywood College	200	1	0	0	1	198	0	0
Medical College of Pennsylvania, The	0	0	0	0	0	0	0	0
Millersville University of Pennsylvania	117	4	0	1	2	106	0	4
Pennsylvania State University	2,437	79	8	82	42	1,610	17	599
Philadelphia Col of Osteopathic Med	120	7	0	7	2	104	0	0
Philadelphia Coll of Pharmacy and Sci	26	0	0	1	0	11	2	12
Shippensburg University of Pennsylvania	352	16	5	4	5	311	0	11
Slippery Rock University of Pennsylvania	168	4	0	1	1	159	0	3
St Joseph's University	306	18	0	48	0	134	15	91
Swarthmore College	0	0	0	0	0	0	0	0
Temple University	1,100	71	7	154	25	579	27	237
Thomas Jefferson University	307	19	0	44	12	208	0	24
University of Pennsylvania	1,669	48	0	86	17	968	24	526
University of Pittsburgh	1,988	77	4	97	36	1,243	8	523
University of Scranton	130	1	1	3	3	92	13	17
Villanova University	430	6	0	23	3	262	47	89
West Chester University of Pennsylvania	194	9	0	2	2	167	0	14
Widener University	0	0	0	0	0	0	0	0
Wilkes University	6	0	0	0	0	5	0	1
East North Central	51,708	2,850	148	2,638	1,123	32,329	784	11,836
Illinois	17,971	1,431	36	1,370	483	10,736	244	3,671
Bradley University	104	3	1	13	0	10	23	54
Chicago School of Prof Psych	180	7	0	6	12	148	0	7
Chicago State University	343	268	2	6	12	35	9	11

See explanatory information, if any, and SOURCE at end of table.

Table 30. Graduate science students in all institutions, by geographic division, State, institution, and citizenship, and by racial/ethnic background of U.S. citizens: 1996

Division, State, and institution	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Illinois, continued:								
DePaul University	1,640	151	3	258	87	1,057	19	65
Eastern Illinois University	146	3	0	0	0	123	0	20
Finch U of Hlth Sci/The Chicago Med Sch	288	7	0	77	9	170	5	20
Governors State University	452	144	0	16	14	251	26	1
Illinois Institute of Technology	1,277	205	1	187	36	602	14	232
Illinois State University	564	33	1	24	9	416	0	81
Loyola University of Chicago	832	42	3	75	20	509	8	175
Midwestern University	0	0	0	0	0	0	0	0
Northeastern Illinois University	382	9	0	51	20	289	0	13
Northern Illinois University	905	28	2	50	10	637	7	171
Northwestern University	996	46	4	72	25	560	10	279
Roosevelt University	585	110	3	40	26	363	17	26
Rush University	77	1	0	7	1	47	1	20
Southern Illinois Univ at Carbondale	1,032	37	2	31	24	717	5	216
Southern Illinois Univ at Edwardsville	464	48	2	11	6	346	0	51
Univ of Illinois at Urbana-Champaign	3,143	65	2	184	50	1,671	37	1,134
University of Chicago	1,954	49	4	141	55	1,129	2	574
University of Illinois at Chicago	1,273	87	4	57	49	605	47	424
University of Illinois at Springfield	887	76	1	58	8	744	0	0
Western Illinois University	447	12	1	6	10	307	14	97
Indiana	6,718	199	15	213	91	4,255	121	1,824
Ball State University	421	1	0	5	0	312	0	103
Butler University	4	0	0	0	0	4	0	0
Indiana State University	346	24	1	14	7	235	1	64
Indiana University	3,241	104	6	89	64	2,315	54	609
Indiana Wesleyan University	0	0	0	0	0	0	0	0
Purdue University	2,004	56	8	88	3	986	57	806
Rose-Hulman Institute of Technology	15	0	0	0	0	6	0	3
Saint Francis College	35	3	0	0	0	26	5	1
University of Evansville	0	0	0	0	0	0	0	0
University of Notre Dame	606	8	0	17	16	330	3	232
Valparaiso University	46	3	0	0	1	41	1	0
Michigan	9,315	607	36	391	268	5,410	162	2,441
Andrews University	144	14	0	4	8	68	0	50
Central Michigan University	422	12	3	13	6	311	3	74
Eastern Michigan University	549	19	0	51	5	265	46	163
Grand Valley State University	163	16	0	11	30	102	0	4
Michigan State University	2,442	108	11	67	52	1,333	24	847
Michigan Technological University	218	2	1	3	2	117	2	91
Northern Michigan University	75	2	1	0	1	69	0	2
Oakland University	201	12	2	4	3	154	2	24
University of Detroit Mercy	299	34	0	9	0	213	0	43
University of Michigan	2,333	167	9	152	102	1,379	29	495
Wayne State University	1,378	133	5	60	22	680	55	423
Western Michigan University	1,091	88	4	17	37	719	1	225
Ohio	12,217	523	45	513	169	8,088	171	2,708
Air Force Institute of Technology	274	0	0	10	0	108	0	156
Antioch University	1,361	41	10	16	35	1,198	30	31
Bowling Green State University	609	30	6	11	6	354	4	198
Case Western Reserve University	815	22	2	47	10	477	49	208
Cleveland State University	447	61	0	18	10	312	3	43
John Carroll University	70	3	0	4	0	63	0	0
Kent State University	799	30	5	18	10	543	4	189
Medical College of Ohio at Toledo	155	1	0	63	0	68	0	23
Miami University	414	12	0	14	6	338	0	44
Ohio State University, The	2,942	90	13	179	47	1,704	15	894
Ohio University	667	11	0	2	3	395	0	256
Union Institute	302	30	2	5	1	232	32	0
University of Akron	904	14	0	15	6	632	2	235
University of Cincinnati	1,034	69	3	54	15	676	9	208
University of Dayton	181	7	0	6	3	141	0	24
University of Toledo	437	33	1	24	5	254	2	118

See explanatory information, if any, and SOURCE at end of table.

Table 30. Graduate science students in all institutions, by geographic division, State, institution, and citizenship, and by racial/ethnic background of U.S. citizens: 1996

Division, State, and institution	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Ohio, continued:								
Wright State University	597	46	3	26	10	416	18	78
Xavier University	75	12	0	1	2	59	1	0
Youngstown State University	134	11	0	0	0	118	2	3
Wisconsin	5,487	90	16	151	112	3,840	86	1,192
Marquette University	270	8	0	11	3	146	7	95
Medical College of Wisconsin	117	0	0	9	2	80	5	21
Milwaukee School of Engineering	0	0	0	0	0	0	0	0
University of Wisconsin - Eau Claire	26	1	0	0	0	25	0	0
University of Wisconsin - Green Bay	65	0	0	5	0	60	0	0
University of Wisconsin - La Crosse	60	0	1	4	0	54	1	0
University of Wisconsin - Madison	3,574	34	12	92	90	2,385	60	901
University of Wisconsin - Milwaukee	1,029	43	2	25	15	778	13	153
University of Wisconsin - Oshkosh	142	4	1	5	1	128	0	3
University of Wisconsin - Platteville	8	0	0	0	0	8	0	0
University of Wisconsin - River Falls	39	0	0	0	0	37	0	2
University of Wisconsin - Stevens Point	69	0	0	0	1	66	0	2
University of Wisconsin - Stout	71	0	0	0	0	58	0	13
University of Wisconsin - Whitewater	17	0	0	0	0	15	0	2
West North Central	21,456	541	95	656	328	12,893	2,192	4,751
Iowa	3,509	66	10	80	49	1,806	304	1,194
Drake University	193	0	0	0	0	19	172	2
Iowa State University	1,876	33	5	32	30	923	99	719
Loras College	15	0	0	0	0	15	0	0
Maharishi University of Management	35	1	0	0	1	13	4	16
Marycrest International Univ	28	0	0	1	0	2	18	7
Univ of Osteopathic Med & Health Sci	0	0	0	0	0	0	0	0
University of Iowa	1,194	20	4	47	17	692	10	404
University of Northern Iowa	168	12	1	0	1	137	1	16
Kansas	4,541	143	40	92	94	2,790	434	948
Emporia State University	225	2	0	3	2	186	15	17
Fort Hays State University	64	1	1	3	3	56	0	0
Kansas State University	1,331	32	8	45	21	782	2	441
Pittsburg State University	192	1	3	3	1	160	11	13
University of Kansas	2,275	93	26	32	55	1,309	400	360
Washburn University of Topeka	28	1	0	0	1	25	0	0
Wichita State University	426	13	2	6	11	271	6	117
Minnesota	5,305	77	16	122	50	2,752	1,357	931
Bemidji State University	24	0	1	0	0	6	11	6
Mankato State University	288	12	1	13	3	204	18	37
Mayo Graduate School	133	2	1	5	5	93	1	26
Moorhead State University	51	0	0	0	0	51	0	0
Saint Mary's University of Minnesota	986	0	0	0	0	0	986	0
St. Cloud State University	68	1	0	1	0	66	0	0
University of Minnesota	3,532	48	12	99	35	2,212	264	862
Walden University	223	14	1	4	7	120	77	0
Missouri	4,552	191	10	240	82	3,085	55	889
Central Missouri State University	269	10	0	12	5	239	0	3
Forest Institute of Professional Psych	166	3	1	1	3	157	0	1
Kirksville College of Osteopathic Med	0	0	0	0	0	0	0	0
Lincoln University	20	11	0	0	0	9	0	0
Northwest Missouri State University	37	0	0	1	0	34	0	2
Saint Louis University	463	31	2	17	9	340	2	62
Southeast Missouri State University	44	0	0	1	0	41	0	2
Southwest Missouri State University	192	4	0	4	3	170	2	9
Truman State University	11	0	0	3	0	6	2	0
University of Missouri - Columbia	1,262	57	1	78	14	795	5	312
University of Missouri - Kansas City	470	20	1	21	12	259	21	136

See explanatory information, if any, and SOURCE at end of table.

Table 30. Graduate science students in all institutions, by geographic division, State, institution, and citizenship, and by racial/ethnic background of U.S. citizens: 1996

Division, State, and institution	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Missouri, continued:								
University of Missouri - Rolla	261	3	2	8	1	124	12	111
University of Missouri - St Louis	438	31	1	27	21	321	5	32
Washington University	919	21	2	67	14	590	6	219
Nebraska	2,135	50	6	84	45	1,453	29	468
Creighton University	129	1	1	16	2	80	8	21
University of Nebraska - Lincoln	1,333	22	4	61	34	843	2	367
University of Nebraska - Omaha	526	25	0	6	9	408	19	59
University of Nebraska Medical Center	87	2	1	1	0	62	0	21
University of Nebraska at Kearney	60	0	0	0	0	60	0	0
North Dakota	744	8	6	14	6	511	12	187
North Dakota State University	469	7	0	2	1	284	3	172
University of North Dakota	275	1	6	12	5	227	9	15
South Dakota	670	5	7	24	2	496	1	134
South Dakota School of Mines and Tech	82	0	0	0	0	55	0	27
South Dakota State University	363	5	2	16	0	263	0	77
University of South Dakota	225	1	5	8	2	178	1	30
South Atlantic	51,207	4,386	131	2,353	1,497	32,994	1,004	8,842
Delaware	1,097	61	3	54	26	667	3	283
Delaware State University	50	11	0	1	0	32	3	3
University of Delaware	1,047	50	3	53	26	635	0	280
District of Columbia	6,742	866	15	374	220	3,572	347	1,348
American University	2,034	211	7	94	90	1,224	37	371
Catholic University of America	455	14	0	18	17	305	4	97
Gallaudet University	0	0	0	0	0	0	0	0
George Washington University	2,856	144	7	188	103	1,620	258	536
Georgetown University	716	8	1	51	10	388	8	250
Howard University	651	467	0	23	0	31	40	90
University of the District of Columbia	30	22	0	0	0	4	0	4
Florida	10,228	663	30	342	795	6,606	213	1,579
Embry-Riddle Aeronautical University	41	2	0	2	2	21	0	14
Florida A & M University	164	86	1	8	4	28	33	4
Florida Atlantic University	637	42	2	32	48	423	0	90
Florida Institute of Technology	518	19	1	11	17	345	3	122
Florida International University	804	91	1	18	241	317	92	44
Florida State University	1,203	70	2	57	37	824	2	211
Jacksonville University	0	0	0	0	0	0	0	0
Nova Southeastern University	1,712	110	5	28	151	1,305	37	76
University of Central Florida	787	43	1	40	47	559	0	97
University of Florida	2,122	76	8	70	79	1,249	27	613
University of Miami	819	44	3	30	104	411	13	214
University of South Florida	1,029	55	4	36	51	793	6	84
University of West Florida	392	25	2	10	14	331	0	10
Georgia	5,712	739	19	201	99	3,569	108	977
Atlanta University	0	0	0	0	0	0	0	0
Augusta State University	38	2	0	2	0	34	0	0
Clark Atlanta University	374	297	2	8	10	0	8	49
Emory University	713	34	1	39	11	481	0	147
Fort Valley State College	0	0	0	0	0	0	0	0
Georgia College and State University	210	38	1	3	6	159	0	3
Georgia Institute of Technology	855	59	4	27	19	542	0	204
Georgia Southern University	159	20	0	2	2	133	0	2
Georgia State University	1,024	162	4	78	17	580	84	99
Institute of Paper Science & Technology	0	0	0	0	0	0	0	0
Medical College of Georgia	100	5	0	2	2	47	3	41

See explanatory information, if any, and SOURCE at end of table.

Table 30. Graduate science students in all institutions, by geographic division, State, institution, and citizenship, and by racial/ethnic background of U.S. citizens: 1996

Division, State, and institution	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Georgia, continued:								
Mercer University	35	1	0	3	0	25	0	6
Morehouse School of Medicine	22	15	0	0	2	2	1	2
State University of West Georgia	142	13	4	1	1	121	1	1
University of Georgia	1,774	47	3	36	20	1,238	7	423
Valdosta State University	266	46	0	0	9	207	4	0
Maryland	7,199	567	16	479	112	4,313	189	1,523
Coppin State College	55	52	0	0	0	3	0	0
Frostburg State University	76	2	0	1	2	69	0	2
Hood College	374	13	0	39	1	218	92	11
Johns Hopkins University	1,394	39	3	158	26	803	19	346
Loyola College	528	41	0	5	2	432	23	25
Morgan State University	69	47	0	2	2	12	3	3
Towson State University	401	24	4	25	5	282	0	61
Uniformed Serv Univ of the Hlth Sciences	55	1	1	2	2	48	1	0
Univ of Maryland - Baltimore County	821	52	0	51	6	483	1	228
University of Baltimore	417	130	2	5	6	252	9	13
University of Maryland - College Park	2,580	129	6	133	54	1,469	29	760
University of Maryland Eastern Shore	98	22	0	26	3	38	4	5
University of Maryland at Baltimore	315	15	0	32	3	191	6	68
Washington College	16	0	0	0	0	13	2	1
North Carolina	7,834	741	19	333	89	5,547	17	1,088
Appalachian State University	260	5	1	0	5	243	0	6
Duke University	1,049	31	2	59	8	736	4	209
East Carolina University	331	8	2	6	5	286	9	15
North Carolina A & T State University	165	117	0	10	0	22	0	16
North Carolina Central University	308	257	2	6	1	42	0	0
North Carolina State University	2,142	89	6	82	25	1,541	0	399
Univ of North Carolina at Chapel Hill	2,202	138	3	118	30	1,609	3	301
Univ of North Carolina at Charlotte	559	51	2	23	7	373	0	103
Univ of North Carolina at Greensboro	288	28	0	5	4	233	1	17
University of North Carolina Wilmington	146	4	1	12	1	128	0	0
Wake Forest University	271	10	0	11	3	227	0	20
Western Carolina University	113	3	0	1	0	107	0	2
South Carolina	2,682	108	3	32	39	1,879	30	591
Clemson University	1,042	26	0	6	12	692	27	279
College of Charleston	167	4	1	2	1	152	0	7
Furman University	10	0	0	0	0	10	0	0
Medical University of South Carolina	238	8	0	2	5	174	1	48
University of South Carolina	1,139	63	2	22	20	773	2	257
Winthrop University	86	7	0	0	1	78	0	0
Virginia	8,288	619	21	502	114	5,720	84	1,228
College of William and Mary	378	14	1	15	7	301	0	40
Eastern Virginia Medical School	136	14	1	5	1	101	0	14
George Mason University	2,398	107	5	260	46	1,605	16	359
Hampton University	98	67	0	12	0	5	4	10
Hollins College	6	0	0	0	0	6	0	0
Institute of Textile Technology	0	0	0	0	0	0	0	0
James Madison University	104	2	2	3	0	85	0	12
Old Dominion University	874	98	4	23	12	520	36	181
Radford University	184	11	0	2	0	153	18	0
University of Richmond	12	0	0	1	0	11	0	0
University of Virginia	1,105	38	2	48	9	851	7	150
Virginia Commonwealth University	1,128	127	3	79	8	832	3	76
Virginia Polytechnic Inst and State Univ	1,781	70	3	51	31	1,240	0	386
Virginia State University	84	71	0	3	0	10	0	0
West Virginia	1,425	22	5	36	3	1,121	13	225
Marshall University	264	1	1	8	0	216	13	25
University of Charleston	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table 30. Graduate science students in all institutions, by geographic division, State, institution, and citizenship, and by racial/ethnic background of U.S. citizens: 1996

Division, State, and institution	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
West Virginia, continued:								
West Virginia Graduate College	309	5	0	5	0	299	0	0
West Virginia Institute of Technology	0	0	0	0	0	0	0	0
West Virginia University	852	16	4	23	3	606	0	200
East South Central	13,692	1,528	42	424	168	9,037	107	2,386
Alabama	3,832	470	13	112	52	2,419	19	747
Alabama A & M University	194	97	0	4	0	21	3	69
Alabama State University	22	21	0	0	0	1	0	0
Auburn University	1,197	124	3	17	16	787	10	240
Jacksonville State University	221	57	3	5	7	140	0	9
Troy State University in Montgomery	56	6	0	0	1	48	0	1
Tuskegee University	52	32	1	2	0	1	3	13
University of Alabama at Birmingham, The	753	59	2	47	9	489	2	145
University of Alabama in Huntsville, The	295	8	1	16	6	208	0	56
University of Alabama, The	730	45	1	13	5	536	1	129
University of Montevallo	0	0	0	0	0	0	0	0
University of South Alabama	312	21	2	8	8	188	0	85
Kentucky	2,918	125	8	90	40	2,098	44	513
Eastern Kentucky University	251	17	0	8	3	222	0	1
Morehead State University	76	1	0	0	0	71	0	4
Murray State University	255	11	0	2	3	173	0	66
Spalding University	125	3	1	1	2	115	0	3
University of Kentucky	1,353	58	6	35	20	888	40	306
University of Louisville	628	24	1	30	10	440	0	123
Western Kentucky University	230	11	0	14	2	189	4	10
Mississippi	2,331	401	4	72	33	1,289	35	497
Jackson State University	322	238	0	24	1	20	13	26
Mississippi State University	825	61	0	38	18	463	5	240
Mississippi University for Women	0	0	0	0	0	0	0	0
University of Mississippi	580	54	4	10	5	324	17	166
University of Southern Mississippi	604	48	0	0	9	482	0	65
Tennessee	4,611	532	17	150	43	3,231	9	629
Austin Peay State University	54	2	1	0	1	48	0	2
East Tennessee State University	325	11	1	3	1	273	1	35
Fisk University	40	34	0	0	0	1	0	5
Meharry Medical College	139	120	0	4	1	11	3	0
Middle Tennessee State University	441	29	2	30	8	371	1	0
Tennessee State University	316	168	0	6	0	123	0	19
Tennessee Technological University	155	3	0	0	1	138	0	13
University of Memphis	634	62	0	21	14	433	3	101
University of Tennessee at Chattanooga	172	27	1	4	2	119	0	19
University of Tennessee at Knoxville	1,391	40	6	29	8	1,091	0	217
University of Tennessee, Memphis	106	4	0	7	1	49	0	45
Vanderbilt University	838	32	6	46	6	574	1	173
West South Central	28,420	1,655	194	1,453	1,468	17,003	376	6,271
Arkansas	1,411	111	9	37	9	1,031	0	214
Arkansas State University	260	21	0	0	0	211	0	28
University of Arkansas	607	13	6	18	5	449	0	116
University of Arkansas - Med Sci Campus	138	7	2	8	0	83	0	38
University of Arkansas at Little Rock	230	54	0	5	3	137	0	31
University of Central Arkansas	176	16	1	6	1	151	0	1
Louisiana	4,528	625	10	155	91	2,497	73	1,077
Grambling State University	17	16	0	0	0	0	0	1
Louisiana State University	2,503	197	7	79	61	1,473	54	632
Louisiana Tech University	115	3	0	1	0	55	0	56
Loyola University New Orleans	0	0	0	0	0	0	0	0
McNeese State University	129	10	0	6	0	93	5	15
Nicholls State University	47	4	1	0	2	36	0	4

See explanatory information, if any, and SOURCE at end of table

Table 30. Graduate science students in all institutions, by geographic division, State, institution, and citizenship, and by racial/ethnic background of U.S. citizens: 1996

Division, State, and institution	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Louisiana, continued:								
Northeast Louisiana University	172	25	0	3	0	118	0	26
Northwestern State University	25	4	0	0	1	20	0	0
Southeastern Louisiana University	57	3	0	0	0	54	0	0
Southern University A & M, All Campuses	440	334	0	26	0	65	3	12
Tulane University	646	20	1	32	24	413	11	145
University of Southwestern Louisiana	377	9	1	8	3	170	0	186
Xavier University of Louisiana	0	0	0	0	0	0	0	0
Oklahoma	2,763	60	102	98	35	1,761	31	676
East Central University	23	0	2	0	0	20	0	1
Northeastern State University	99	4	0	0	0	88	0	7
Oklahoma State University	1,180	21	42	41	20	697	0	359
Oral Roberts University	0	0	0	0	0	0	0	0
Southwestern Oklahoma State University	18	1	1	0	0	15	0	1
University of Oklahoma	1,268	32	48	53	13	823	26	273
University of Tulsa	175	2	9	4	2	118	5	35
Texas	19,718	859	73	1,163	1,333	11,714	272	4,304
Abilene Christian University	133	2	0	0	3	110	1	17
Angelo State University	154	2	0	2	15	131	0	4
Baylor College of Dentistry	7	0	0	0	2	5	0	0
Baylor College of Medicine	284	2	0	15	9	169	0	89
Baylor University	332	7	1	28	20	233	7	36
Lamar University-Beaumont	162	11	0	0	3	99	1	48
Midwestern State University	143	4	0	3	2	82	26	26
Prairie View A & M University	136	103	0	4	0	5	0	24
Rice University	519	20	4	22	21	281	2	169
Sam Houston State University	369	24	4	4	19	265	0	53
Southern Methodist University	493	16	1	35	19	314	0	108
Southwest Texas State University	698	26	1	19	78	500	0	74
St. Mary's University	186	10	0	5	46	112	3	10
Stephen F. Austin State University	247	8	1	5	4	204	0	25
Sul Ross State University	78	0	0	1	5	72	0	0
Tarleton State University	82	0	1	1	1	78	0	1
Texas A & M University	3,203	52	2	167	139	2,005	12	826
Texas A & M University - Corpus Christi	263	1	0	4	65	182	0	11
Texas A & M University-Kingsville	222	3	1	6	92	65	4	51
Texas A&M University-Commerce	244	5	1	4	0	163	0	71
Texas Christian University	142	0	0	2	5	107	2	26
Texas Southern University	255	178	0	2	6	10	11	48
Texas Tech University	907	9	0	14	49	560	24	251
Texas Woman's University	573	34	7	28	28	440	36	0
Trinity University	27	1	1	0	10	15	0	0
U of North TX Hlth Sci Ctr at Ft Worth	0	0	0	0	0	0	0	0
Univ of Texas Hlth Sci Ctr San Antonio	182	6	1	8	16	95	5	51
Univ of Texas Hlth Sci Ctr at Houston	588	19	2	66	42	296	0	163
Univ of Texas M.D. Anderson Cancer Ctr	0	0	0	0	0	0	0	0
Univ of Texas Med Branch at Galveston	140	3	0	10	9	65	0	53
Univ of Texas SW Medical Ctr at Dallas	361	4	1	37	14	215	0	90
Univ of Texas at Arlington	860	38	3	48	27	489	0	255
University of Central Texas	203	47	1	8	19	103	23	2
University of Houston	1,140	30	5	293	57	533	4	218
University of Houston - Victoria	40	1	0	0	3	36	0	0
University of Houston at Clear Lake City	858	78	2	61	62	557	0	98
University of Incarnate Word	74	6	1	1	18	46	2	0
University of North Texas	1,178	37	18	44	64	684	32	239
University of Texas - Pan American, The	47	0	1	0	34	12	0	0
University of Texas at Austin	2,275	29	6	49	104	1,428	17	642
University of Texas at Dallas	858	25	3	125	17	350	0	338
University of Texas at El Paso	343	8	2	5	123	125	0	80
University of Texas at San Antonio	354	7	1	29	74	206	0	37
University of Texas at Tyler	136	2	0	6	0	75	0	53
University of Texas of the Permian Basin	75	0	0	0	3	72	0	0
West Texas A&M University	147	1	1	2	8	120	0	17
Mountain	19,972	241	157	668	768	14,587	374	3,177

See explanatory information, if any, and SOURCE at end of table.

Table 30. Graduate science students in all institutions, by geographic division, State, institution, and citizenship, and by racial/ethnic background of U.S. citizens: 1996

Division, State, and institution	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Arizona	4,750	70	56	165	223	3,212	52	972
Arizona State University	1,932	34	16	52	82	1,278	39	431
Northern Arizona University	549	11	28	11	32	441	2	24
University of Arizona	2,269	25	12	102	109	1,493	11	517
Colorado	6,012	107	34	237	179	4,601	93	761
Colorado School of Mines	522	6	2	11	8	355	0	140
Colorado State University	1,338	13	8	23	27	1,084	0	183
National Technological University	127	6	0	15	2	92	5	7
University of Colorado	3,097	68	20	146	106	2,360	85	312
University of Denver	748	13	3	38	30	553	3	108
University of Northern Colorado	180	1	1	4	6	157	0	11
Idaho	991	3	8	13	13	820	5	129
Idaho State University	263	2	3	6	4	239	2	7
University of Idaho	728	1	5	7	9	581	3	122
Montana	1,031	1	14	21	4	848	13	130
Montana State University - Bozeman	449	0	1	7	2	355	5	79
Montana Tech of the Univ of Montana	32	0	1	0	0	28	0	3
University of Montana	550	1	12	14	2	465	8	48
Nevada	1,145	28	5	38	42	837	33	162
University of Nevada at Las Vegas	398	25	2	16	18	296	13	28
University of Nevada at Reno	747	3	3	22	24	541	20	134
New Mexico	2,449	17	20	54	261	1,612	85	400
Eastern New Mexico University	79	3	1	0	3	63	0	9
New Mexico Highlands University	72	1	2	0	23	34	0	12
New Mexico Institute of Mining and Tech	171	0	1	0	3	110	1	56
New Mexico State University	878	8	3	26	140	430	66	205
University of New Mexico	1,249	5	13	28	92	975	18	118
Utah	2,958	13	17	122	38	2,136	74	558
Brigham Young University	916	2	3	1	9	742	19	90
University of Utah	1,117	5	5	58	16	746	51	236
Utah State University	925	6	9	13	13	648	4	232
Wyoming	636	2	3	18	8	521	19	65
University of Wyoming	636	2	3	18	8	521	19	65
Pacific	49,060	1,778	387	4,833	2,763	28,674	3,012	7,613
Alaska	637	4	17	7	5	490	17	97
University of Alaska Anchorage	111	1	8	3	3	95	1	0
University of Alaska Southeast	25	0	0	0	0	25	0	0
University of Alaska at Fairbanks	501	3	9	4	2	370	16	97
California	39,246	1,667	284	4,198	2,545	22,292	2,655	5,605
Azusa Pacific University	363	23	0	49	13	230	10	38
Biola University	174	4	2	15	2	134	0	17
Cal Schl of Prof Psych Berkeley/Alameda	370	20	3	32	27	257	22	7
Calif Poly State Univ, San Luis Obispo	236	3	0	2	5	185	3	38
Calif Sch of Prof Psych - Fresno	411	27	9	25	28	279	31	12
Calif Sch of Prof Psych - Los Angeles	280	28	6	29	29	156	28	4
Calif Sch of Prof Psych - San Diego	618	19	13	31	33	463	45	14
Calif State Univ at Dominguez Hills	408	164	4	29	55	121	30	5
Calif State Univ at Fullerton	753	15	8	86	84	359	73	128
Calif State Univ at Los Angeles	647	76	6	126	180	142	77	40
Calif State University at Sacramento	914	54	12	95	78	501	122	52
Calif State University, Stanislaus	157	8	1	4	15	118	11	0

See explanatory information, if any, and SOURCE at end of table.

Table 30. Graduate science students in all institutions, by geographic division, State, institution, and citizenship, and by racial/ethnic background of U.S. citizens: 1996

Division, State, and institution	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
California, continued:								
California Institute of Integral Studies	487	11	2	11	15	407	21	20
California Institute of Technology	655	11	0	42	14	328	0	260
California State Poly University, Pomona	313	8	1	51	36	155	28	34
California State Univ - Bakersfield	69	4	2	4	11	43	4	1
California State Univ. San Bernadino	340	29	4	13	45	182	47	20
California State University, Chico	296	5	5	14	13	201	31	27
California State University, Fresno	486	13	7	35	86	222	62	61
California State University, Hayward	808	76	6	133	62	343	133	55
California State University, Long Beach	953	53	4	166	104	438	101	87
California State University, Northridge	528	7	1	57	45	293	76	49
Chapman University	447	20	3	18	26	354	25	1
Charles R. Drew Univ of Medicine & Sci	0	0	0	0	0	0	0	0
Claremont Graduate School	684	38	2	68	55	347	59	115
Dominican College of San Rafael	129	2	0	9	5	85	2	26
Fielding Institute, The	905	61	10	21	35	775	3	0
Fuller Theological Seminary	408	11	2	62	19	288	3	23
Golden Gate University	381	43	0	63	27	183	17	48
Harvey Mudd College	0	0	0	0	0	0	0	0
Humboldt State University	244	2	4	7	10	186	32	3
John F Kennedy University	744	30	12	32	20	609	41	0
Loma Linda University	278	6	1	32	10	128	10	91
Loyola Marymount University	122	3	0	14	14	70	17	4
National University	929	110	7	69	109	575	25	34
Northrop University	0	0	0	0	0	0	0	0
Occidental College	3	0	0	0	1	2	0	0
Pacific Graduate School of Psychology	349	7	2	15	27	280	2	16
Pacific States University	5	0	0	5	0	0	0	0
Pepperdine University	806	38	13	57	69	470	144	15
RAND Graduate School of Policy Studies	52	0	0	5	4	43	0	0
San Diego State University	1,037	30	12	86	74	726	59	50
San Francisco State University	833	35	13	117	61	438	116	53
San Jose State University	772	19	4	130	45	366	120	88
Santa Clara University	513	5	1	110	14	140	48	195
Sonoma State University	110	2	2	1	5	80	20	0
Stanford University	2,195	54	7	277	62	1,142	12	641
US International University	525	27	10	20	32	394	21	21
US Naval Postgraduate School	485	6	0	26	0	231	3	219
University of Calif at Berkeley	2,933	75	15	306	137	1,819	135	446
University of Calif at Davis	1,924	27	15	158	83	1,138	225	279
University of Calif at Riverside	757	15	1	91	53	395	67	135
University of Calif at San Diego	1,421	26	3	153	66	848	95	230
University of Calif at San Francisco	308	4	0	52	16	208	8	20
University of Calif at Santa Barbara	1,043	19	3	71	68	675	46	161
University of Calif at Santa Cruz	662	23	5	65	45	378	79	67
University of California, Irvine	1,013	13	13	139	51	583	68	146
University of California, Los Angeles	2,840	103	22	508	159	1,383	114	551
University of La Verne	130	23	1	23	13	69	1	0
University of Redlands	0	0	0	0	0	0	0	0
University of San Diego	51	1	0	2	5	35	1	7
University of San Francisco	138	3	0	14	3	30	38	50
University of Southern California	2,502	105	2	300	116	1,051	44	884
University of the Pacific	54	0	0	1	5	36	0	12
West Coast University	0	0	0	0	0	0	0	0
Whittier College	0	0	0	0	0	0	0	0
Wright Institute, The	248	23	1	22	21	175	0	6
Hawaii	1,515	4	3	299	11	648	19	531
University of Hawaii at Manoa	1,515	4	3	299	11	648	19	531
Oregon	3,072	29	35	109	90	1,963	149	697
Oregon Grad Inst of Science & Technology	145	1	0	9	2	79	0	54
Oregon Health Sciences University	135	0	1	4	0	95	0	35
Oregon State University	1,253	6	15	36	54	772	22	348
Pacific University	0	0	0	0	0	0	0	0
Portland State University	775	13	11	24	13	534	81	99
Southern Oregon State College	61	0	1	7	1	49	3	0

See explanatory information, if any, and SOURCE at end of table.

Table 30. Graduate science students in all institutions, by geographic division, State, institution, and citizenship, and by racial/ethnic background of U.S. citizens: 1996

Division, State, and institution	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Oregon, continued:								
University of Oregon	703	9	7	29	20	434	43	161
University of Portland	0	0	0	0	0	0	0	0
Washington	4,590	74	48	220	112	3,281	172	683
Central Washington University	89	0	5	2	5	75	1	1
Eastern Washington University	231	0	3	4	2	200	21	1
Gonzaga University	0	0	0	0	0	0	0	0
Pacific Lutheran University	72	7	1	2	0	47	15	0
Saint Martin's College	0	0	0	0	0	0	0	0
Seattle University	168	7	1	6	2	130	11	11
University of Washington - Seattle	2,719	46	25	178	66	1,875	97	432
Walla Walla College	10	0	0	0	0	10	0	0
Washington State University	1,093	14	9	20	30	777	12	231
Western Washington University	208	0	4	8	7	167	15	7
Whitworth College	0	0	0	0	0	0	0	0
Outlying Areas	2,009	5	0	46	1,582	185	3	188
Guam	57	0	0	35	1	20	1	0
University of Guam	57	0	0	35	1	20	1	0
Puerto Rico	1,952	5	0	11	1,581	165	2	188
Caribbean Center for Advanced Studies	320	0	0	0	320	0	0	0
Ponce School of Medicine	13	0	0	0	13	0	0	0
The Pontifical Cath Univ of Puerto Rico	10	0	0	0	10	0	0	0
Univ of Puerto Rico Mayaguez Campus	409	1	0	1	317	12	0	78
Univ of Puerto Rico Rio Piedras Campus	1,065	4	0	4	798	151	2	106
University of Puerto Rico Med Sci Campus	135	0	0	6	123	2	0	4

NOTE: Includes medical schools

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 31. Graduate engineering students in all institutions, by geographic division, State, institution, and citizenship, and by racial/ethnic background of U.S. citizens: 1996

Division, State, and institution	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Total, all institutions	103,223	2,894	234	8,450	2,935	49,079	4,581	35,050
New England	7,781	133	11	512	115	3,669	946	2,395
Connecticut	969	15	0	51	9	471	101	322
Central Connecticut State University	0	0	0	0	0	0	0	0
Connecticut College	0	0	0	0	0	0	0	0
Hartford Graduate Center, The	192	2	0	8	1	134	33	14
Quinnipiac College	0	0	0	0	0	0	0	0
Southern Connecticut State University	0	0	0	0	0	0	0	0
St. Joseph College	0	0	0	0	0	0	0	0
Trinity College	0	0	0	0	0	0	0	0
University of Bridgeport	85	1	0	3	2	24	0	55
University of Connecticut	448	11	0	25	3	199	48	162
University of Hartford	44	0	0	9	1	24	10	0
University of New Haven	113	1	0	6	0	77	0	29
Wesleyan University	0	0	0	0	0	0	0	0
Western Connecticut State University	0	0	0	0	0	0	0	0
Yale University	87	0	0	0	2	13	10	62
Maine	146	2	0	8	0	87	39	10
University of Maine	146	2	0	8	0	87	39	10
University of New England	0	0	0	0	0	0	0	0
Massachusetts	6,018	110	10	391	100	2,725	788	1,894
American International College	0	0	0	0	0	0	0	0
Anna Maria College	0	0	0	0	0	0	0	0
Assumption College	0	0	0	0	0	0	0	0
Boston College	0	0	0	0	0	0	0	0
Boston University	368	2	0	13	3	100	112	138
Brandeis University	0	0	0	0	0	0	0	0
Bridgewater State College	0	0	0	0	0	0	0	0
Clark University	0	0	0	0	0	0	0	0
Emerson College	0	0	0	0	0	0	0	0
Framingham State College	0	0	0	0	0	0	0	0
Harvard University	177	4	0	20	0	73	17	63
MGH Institute of Health Professions	0	0	0	0	0	0	0	0
Mass College of Pharmacy Allied Health	0	0	0	0	0	0	0	0
Massachusetts Institute of Technology	2,318	55	5	234	63	1,171	9	781
Mount Holyoke College	0	0	0	0	0	0	0	0
Northeastern University	985	7	0	17	5	184	472	300
Salem State College	0	0	0	0	0	0	0	0
Smith College	0	0	0	0	0	0	0	0
Tufts University	369	16	0	18	1	238	4	92
University of Massachusetts	495	3	0	8	12	151	79	242
University of Massachusetts Dartmouth	59	0	0	0	0	15	0	44
University of Massachusetts Lowell	762	21	5	52	7	450	94	133
Western New England College	59	0	0	2	0	57	0	0
Williams College	0	0	0	0	0	0	0	0
Woods Hole Oceanographic Institution	25	0	0	1	1	17	0	6
Worcester Polytechnic Institute	401	2	0	26	8	269	1	95
Worcester State College	0	0	0	0	0	0	0	0
New Hampshire	226	1	0	8	1	151	11	54
Dartmouth College	68	0	0	2	0	35	0	31
River College	0	0	0	0	0	0	0	0
University of New Hampshire	158	1	0	6	1	116	11	23
Rhode Island	316	5	1	40	2	171	0	97
Brown University	92	4	1	2	1	38	0	46
Rhode Island College	0	0	0	0	0	0	0	0
University of Rhode Island	224	1	0	38	1	133	0	51
Vermont	106	0	0	14	3	64	7	18
Goddard College	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table 31. Graduate engineering students in all institutions, by geographic division, State, institution, and citizenship, and by racial/ethnic background of U.S. citizens: 1996

Division, State, and institution	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Vermont, continued:								
Marlboro College	0	0	0	0	0	0	0	0
Middlebury College	0	0	0	0	0	0	0	0
University of Vermont	106	0	0	14	3	64	7	18
Middle Atlantic	15,673	491	26	1,186	385	6,984	1,158	5,443
New Jersey	3,059	113	2	238	102	1,295	333	976
College of New Jersey, The	0	0	0	0	0	0	0	0
Drew University	0	0	0	0	0	0	0	0
Fairleigh Dickinson University	42	0	0	1	0	9	0	32
Kean College of New Jersey	0	0	0	0	0	0	0	0
Monmouth University	169	6	0	11	5	79	52	16
Montclair State University	0	0	0	0	0	0	0	0
New Jersey Institute of Technology	902	29	0	74	59	270	148	322
Princeton University	322	2	1	21	1	154	4	139
Rutgers the State Univ of New Jersey	672	19	0	42	8	268	55	280
Seton Hall University	0	0	0	0	0	0	0	0
Stevens Institute of Technology	952	57	1	89	29	515	74	187
Univ of Med and Dentistry of New Jersey	0	0	0	0	0	0	0	0
William Paterson College	0	0	0	0	0	0	0	0
New York	7,236	253	10	601	193	3,028	605	2,546
Adelphi University	0	0	0	0	0	0	0	0
Albany Medical College	0	0	0	0	0	0	0	0
Alfred University	85	1	0	3	0	0	0	0
CUNY Bernard Baruch College	0	0	0	2	0	56	0	26
CUNY Brooklyn College	0	0	0	0	0	0	0	0
CUNY City College	237	28	0	43	15	45	11	95
CUNY College of Staten Island	0	0	0	0	0	0	0	0
CUNY Graduate School and Univ Center	131	19	0	6	6	15	0	85
CUNY Herbert H. Lehman College	0	0	0	0	0	0	0	0
CUNY Hunter College	0	0	0	0	0	0	0	0
CUNY John Jay College of Crim Justice	0	0	0	0	0	0	0	0
CUNY Mt. Sinai School of Medicine	0	0	0	0	0	0	0	0
CUNY Queens College	0	0	0	0	0	0	0	0
Clarkson University	166	5	4	2	1	73	0	81
College of New Rochelle	0	0	0	0	0	0	0	0
College of St Rose	0	0	0	0	0	0	0	0
Columbia Univ in the City of New York	678	7	0	104	7	159	197	204
Cooper Union	55	2	0	15	3	30	0	5
Cornell University	809	12	2	70	35	319	0	371
Fordham University	0	0	0	0	0	0	0	0
Hofstra University	0	0	0	0	0	0	0	0
Iona College	0	0	0	0	0	0	0	0
Ithaca College	0	0	0	0	0	0	0	0
Long Island University	0	0	0	0	0	0	0	0
Manhattan College	22	2	0	2	0	17	0	1
Marist College	228	5	0	11	18	162	14	18
New School for Social Research	0	0	0	0	0	0	0	0
New York Institute of Technology	0	0	0	0	0	0	0	0
New York Medical College	406	65	0	35	18	240	0	48
New York University	0	0	0	0	0	0	0	0
Niagara University	0	0	0	0	0	0	0	0
Pace University	0	0	0	0	0	0	0	0
Polytechnic University	950	41	0	150	28	287	174	270
Pratt Institute	0	0	0	0	0	0	0	0
Rensselaer Polytechnic Institute	1,052	11	0	41	23	588	15	374
Rochester Institute of Technology	236	10	1	10	9	150	22	34
Russell Sage College	0	0	0	0	0	0	0	0
SUNY, Health Science Center at Syracuse	0	0	0	0	0	0	0	0
SUNY College at Brockport	0	0	0	0	0	0	0	0
SUNY College at Buffalo	0	0	0	0	0	0	0	0
SUNY College at Cortland	0	0	0	0	0	0	0	0
SUNY College at Fredonia	0	0	0	0	0	0	0	0
SUNY College at Geneseo	0	0	0	0	0	0	0	0
SUNY College at Oneonta	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table 31. Graduate engineering students in all institutions, by geographic division, State, institution, and citizenship, and by racial/ethnic background of U.S. citizens: 1996

Division, State, and institution	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
New York, continued								
SUNY College at Oswego	0	0	0	0	0	0	0	0
SUNY College at Plattsburgh	0	0	0	0	0	0	0	0
SUNY College at Potsdam	0	0	0	0	0	0	0	0
SUNY College of Env Science and Forestry	85	0	0	0	0	54	0	31
SUNY College of Optometry	0	0	0	0	0	0	0	0
SUNY Health Science Center at Brooklyn	0	0	0	0	0	0	0	0
SUNY Inst of Technology at Utica-Rome	0	0	0	0	0	0	0	0
SUNY at Albany	0	0	0	0	0	0	0	0
SUNY at Binghamton	227	12	0	15	5	87	26	82
SUNY at Buffalo	860	11	0	47	9	401	81	311
SUNY at New Paltz	0	0	0	0	0	0	0	0
SUNY at Stony Brook	302	9	0	25	9	111	1	147
Saint John's University	0	0	0	0	0	0	0	0
Sarah Lawrence College	0	0	0	0	0	0	0	0
St. Bonaventure University	0	0	0	0	0	0	0	0
Syracuse University	480	9	2	11	4	118	64	272
Teachers College, Columbia University	0	0	0	0	0	0	0	0
The Rockefeller University	0	0	0	0	0	0	0	0
Union College	32	0	0	1	1	30	0	0
University of Rochester	195	4	1	11	2	86	0	91
Vassar College	0	0	0	0	0	0	0	0
Wagner College	0	0	0	0	0	0	0	0
Yeshiva University	0	0	0	0	0	0	0	0
Pennsylvania	5,378	125	14	347	90	2,661	220	1,921
Allegheny Univ. of the Health Sciences	0	0	0	0	0	0	0	0
Bloomsburg University of Pennsylvania	0	0	0	0	0	0	0	0
Bryn Mawr College	0	0	0	0	0	0	0	0
Bucknell University	18	0	0	0	0	7	3	8
California University of Pennsylvania	0	0	0	0	0	0	0	0
Carnegie-Mellon University	575	8	1	36	10	256	0	264
Clarion University of Pennsylvania	0	0	0	0	0	0	0	0
Drexel University	768	23	2	41	12	336	118	236
Duquesne University	0	0	0	0	0	0	0	0
East Stroudsburg Univ of Pennsylvania	0	0	0	0	0	0	0	0
Edinboro University of Pennsylvania	0	0	0	0	0	0	0	0
Gannon University	30	1	0	0	0	27	0	2
Indiana University of Pennsylvania	0	0	0	0	0	0	0	0
Kutztown University of Pennsylvania	0	0	0	0	0	0	0	0
Lehigh University	581	10	0	22	4	259	1	285
Mansfield University of Pennsylvania	0	0	0	0	0	0	0	0
Marywood College	0	0	0	0	0	0	0	0
Medical College of Pennsylvania, The	0	0	0	0	0	0	0	0
Millersville University of Pennsylvania	0	0	0	0	0	0	0	0
Pennsylvania State University	1,617	30	3	122	36	805	39	582
Philadelphia Col of Osteopathic Med	0	0	0	0	0	0	0	0
Philadelphia Coll of Pharmacy and Sci	0	0	0	0	0	0	0	0
Shippensburg University of Pennsylvania	0	0	0	0	0	0	0	0
Slippery Rock University of Pennsylvania	0	0	0	0	0	0	0	0
St Joseph's University	0	0	0	0	0	0	0	0
Swarthmore College	0	0	0	0	0	0	0	0
Temple University	164	11	0	31	3	69	4	46
Thomas Jefferson University	0	0	0	0	0	0	0	0
University of Pennsylvania	435	17	7	52	12	205	0	142
University of Pittsburgh	773	15	0	28	6	439	0	285
University of Scranton	0	0	0	0	0	0	0	0
Villanova University	272	2	0	7	3	171	55	34
West Chester University of Pennsylvania	0	0	0	0	0	0	0	0
Widener University	132	8	1	8	4	79	0	32
Wilkes University	13	0	0	0	0	8	0	5
East North Central	19,862	445	22	1,530	271	9,710	474	7,410
Illinois	4,347	105	3	487	96	2,006	72	1,578
Bradley University	162	2	0	10	2	60	36	52
Chicago School of Prof Psych	0	0	0	0	0	0	0	0
Chicago State University	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

88

Table 31. Graduate engineering students in all institutions, by geographic division, State, institution, and citizenship, and by racial/ethnic background of U.S. citizens: 1996

Division, State, and institution	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Illinois, continued:								
DePaul University	0	0	0	0	0	0	0	0
Eastern Illinois University	0	0	0	0	0	0	0	0
Finch U of Hlth Sci/The Chicago Med Sch	0	0	0	0	0	0	0	0
Governors State University	0	0	0	0	0	0	0	0
Illinois Institute of Technology	861	23	0	119	28	401	1	289
Illinois State University	0	0	0	0	0	0	0	0
Loyola University of Chicago	0	0	0	0	0	0	0	0
Midwestern University	0	0	0	0	0	0	0	0
Northeastern Illinois University	0	0	0	0	0	0	0	0
Northern Illinois University	150	0	0	14	0	83	0	53
Northwestern University	642	24	2	57	10	333	4	212
Roosevelt University	0	0	0	0	0	0	0	0
Rush University	0	0	0	0	0	0	0	0
Southern Illinois Univ at Carbondale	181	12	0	6	3	73	0	87
Southern Illinois Univ at Edwardsville	97	7	0	9	0	44	0	37
Univ of Illinois at Urbana-Champaign	1,430	18	0	134	26	721	0	531
University of Chicago	0	0	0	0	0	0	0	0
University of Illinois at Chicago	824	19	1	138	27	291	31	317
University of Illinois at Springfield	0	0	0	0	0	0	0	0
Western Illinois University	0	0	0	0	0	0	0	0
Indiana	2,122	45	3	132	10	1,004	41	887
Ball State University	65	1	0	5	3	43	2	11
Butler University	0	0	0	0	0	0	0	0
Indiana State University	0	0	0	0	0	0	0	0
Indiana University	108	4	0	23	0	81	0	0
Indiana Wesleyan University	0	0	0	0	0	0	0	0
Purdue University	1,562	36	2	97	1	702	37	687
Rose-Hulman Institute of Technology	120	1	0	0	0	70	0	49
Saint Francis College	0	0	0	0	0	0	0	0
University of Evansville	0	0	0	0	0	0	0	0
University of Notre Dame	267	3	1	7	6	108	2	140
Valparaiso University	0	0	0	0	0	0	0	0
Michigan	5,574	160	4	404	84	2,977	147	1,798
Andrews University	0	0	0	0	0	0	0	0
Central Michigan University	0	0	0	0	0	0	0	0
Eastern Michigan University	0	0	0	0	0	0	0	0
Grand Valley State University	0	0	0	0	0	0	0	0
Michigan State University	539	23	0	33	7	220	5	251
Michigan Technological University	337	2	2	7	1	166	1	158
Northern Michigan University	0	0	0	0	0	0	0	0
Oakland University	618	15	0	33	6	410	11	123
University of Detroit Mercy	185	8	0	6	3	110	0	58
University of Michigan	2,633	77	0	196	54	1,422	81	803
Wayne State University	1,042	26	1	117	10	520	49	319
Western Michigan University	220	9	1	12	3	109	0	86
Ohio	5,554	97	9	429	48	2,364	194	2,413
Air Force Institute of Technology	259	3	0	3	4	144	31	74
Antioch University	69	3	0	4	2	45	1	14
Bowling Green State University	0	0	0	0	0	0	0	0
Case Western Reserve University	611	17	1	28	1	293	16	255
Cleveland State University	311	12	1	57	7	124	3	107
John Carroll University	0	0	0	0	0	0	0	0
Kent State University	0	0	0	0	0	0	0	0
Medical College of Ohio at Toledo	0	0	0	0	0	0	0	0
Miami University	11	0	0	0	0	4	1	6
Ohio State University, The	1,111	17	0	34	20	458	6	576
Ohio University	261	1	1	2	0	83	0	174
Union Institute	0	0	0	0	0	0	0	0
University of Akron	465	1	0	17	2	245	3	197
University of Cincinnati	1,149	20	1	258	4	430	8	428
University of Dayton	454	19	1	15	4	248	122	45
University of Toledo	526	2	2	0	0	91	1	430

See explanatory information, if any, and SOURCE at end of table.

Table 31. Graduate engineering students in all institutions, by geographic division, State, institution, and citizenship, and by racial/ethnic background of U.S. citizens: 1996

Division, State, and institution	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Ohio, continued:								
Wright State University	276	1	2	9	4	160	2	98
Xavier University	0	0	0	0	0	0	0	0
Youngstown State University	51	1	0	2	0	39	0	9
Wisconsin	2,265	38	3	78	33	1,359	20	734
Marquette University	321	4	1	14	9	210	0	83
Medical College of Wisconsin	0	0	0	0	0	0	0	0
Milwaukee School of Engineering	420	11	1	8	5	380	0	15
University of Wisconsin - Eau Claire	0	0	0	0	0	0	0	0
University of Wisconsin - Green Bay	0	0	0	0	0	0	0	0
University of Wisconsin - La Crosse	0	0	0	0	0	0	0	0
University of Wisconsin - Madison	1,124	13	0	37	15	517	19	523
University of Wisconsin - Milwaukee	355	9	1	17	4	228	1	95
University of Wisconsin - Oshkosh	0	0	0	0	0	0	0	0
University of Wisconsin - Platteville	10	0	0	1	0	9	0	0
University of Wisconsin - River Falls	0	0	0	0	0	0	0	0
University of Wisconsin - Stevens Point	0	0	0	0	0	0	0	0
University of Wisconsin - Stout	35	1	0	1	0	15	0	18
University of Wisconsin - Whitewater	0	0	0	0	0	0	0	0
West North Central	5,910	71	7	238	46	2,598	347	2,603
Iowa	1,224	18	0	22	13	491	24	656
Drake University	0	0	0	0	0	0	0	0
Iowa State University	817	13	0	16	8	290	21	469
Loras College	0	0	0	0	0	0	0	0
Maharishi University of Management	0	0	0	0	0	0	0	0
Marycrest International Univ	0	0	0	0	0	0	0	0
Univ of Osteopathic Med & Health Sci	0	0	0	0	0	0	0	0
University of Iowa	407	5	0	6	5	201	3	187
University of Northern Iowa	0	0	0	0	0	0	0	0
Kansas	1,315	12	4	52	15	594	63	575
Emporia State University	0	0	0	0	0	0	0	0
Fort Hays State University	0	0	0	0	0	0	0	0
Kansas State University	378	6	0	12	3	181	0	166
Pittsburg State University	0	0	0	0	0	0	0	0
University of Kansas	551	5	2	19	8	293	51	163
Washburn University of Topeka	0	0	0	0	0	0	0	0
Wichita State University	386	1	2	21	4	110	2	246
Minnesota	1,191	8	0	38	4	468	190	483
Bemidji State University	0	0	0	0	0	0	0	0
Mankato State University	10	0	0	0	0	2	1	7
Mayo Graduate School	0	0	0	0	0	0	0	0
Moorhead State University	0	0	0	0	0	0	0	0
Saint Mary's University of Minnesota	0	0	0	0	0	0	0	0
St. Cloud State University	0	0	0	0	0	0	0	0
University of Minnesota	1,181	8	0	38	4	466	189	476
Walden University	0	0	0	0	0	0	0	0
Missouri	1,343	30	1	72	14	587	44	595
Central Missouri State University	28	3	0	6	1	15	0	3
Forest Institute of Professional Psych	0	0	0	0	0	0	0	0
Kirksville College of Osteopathic Med	0	0	0	0	0	0	0	0
Lincoln University	0	0	0	0	0	0	0	0
Northwest Missouri State University	0	0	0	0	0	0	0	0
Saint Louis University	12	0	0	0	0	3	0	9
Southeast Missouri State University	0	0	0	0	0	0	0	0
Southwest Missouri State University	0	0	0	0	0	0	0	0
Truman State University	0	0	0	0	0	0	0	0
University of Missouri - Columbia	343	10	0	33	3	77	10	210
University of Missouri - Kansas City	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table 31. Graduate engineering students in all institutions, by geographic division, State, institution, and citizenship, and by racial/ethnic background of U.S. citizens: 1996

Division, State, and institution	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Missouri, continued:								
University of Missouri - Rolla	653	14	1	25	8	343	30	232
University of Missouri - St Louis	0	0	0	0	0	0	0	0
Washington University	307	3	0	8	2	149	4	141
Nebraska	425	3	1	5	0	252	4	160
Creighton University	0	0	0	0	0	0	0	0
University of Nebraska - Lincoln	425	3	1	5	0	252	4	160
University of Nebraska - Omaha	0	0	0	0	0	0	0	0
University of Nebraska Medical Center	0	0	0	0	0	0	0	0
University of Nebraska at Kearney	0	0	0	0	0	0	0	0
North Dakota	164	0	0	26	0	94	6	38
North Dakota State University	115	0	0	9	0	64	6	36
University of North Dakota	49	0	0	17	0	30	0	2
South Dakota	248	0	1	23	0	112	16	96
South Dakota School of Mines and Tech	114	0	0	0	0	40	15	59
South Dakota State University	134	0	1	23	0	72	1	37
University of South Dakota	0	0	0	0	0	0	0	0
South Atlantic	17,864	986	39	1,173	579	9,326	289	5,472
Delaware	362	2	0	22	1	160	10	167
Delaware State University	0	0	0	0	0	0	0	0
University of Delaware	362	2	0	22	1	160	10	167
District of Columbia	1,513	128	1	129	35	705	62	453
American University	0	0	0	0	0	0	0	0
Catholic University of America	143	19	0	9	4	64	4	43
Gallaudet University	0	0	0	0	0	0	0	0
George Washington University	1,294	69	1	118	31	634	44	397
Georgetown University	0	0	0	0	0	0	0	0
Howard University	76	40	0	2	0	7	14	13
University of the District of Columbia	0	0	0	0	0	0	0	0
Florida	4,021	210	19	230	342	1,852	145	1,223
Embry-Riddle Aeronautical University	32	0	0	0	0	16	1	15
Florida A & M University	87	56	0	1	9	15	6	0
Florida Atlantic University	258	9	1	24	14	105	0	105
Florida Institute of Technology	238	4	2	7	16	109	4	96
Florida International University	242	16	0	18	80	41	87	0
Florida State University	186	28	0	22	8	80	11	37
Jacksonville University	0	0	0	0	0	0	0	0
Nova Southeastern University	0	0	0	0	0	0	0	0
University of Central Florida	792	28	3	45	60	443	0	213
University of Florida	1,240	31	8	57	55	642	1	446
University of Miami	275	14	2	13	54	84	9	100
University of South Florida	670	24	3	43	46	317	26	211
University of West Florida	0	0	0	0	0	0	0	0
Georgia	2,829	159	3	200	82	1,536	2	847
Atlanta University	0	0	0	0	0	0	0	0
Augusta State University	0	0	0	0	0	0	0	0
Clark Atlanta University	0	0	0	0	0	0	0	0
Emory University	0	0	0	0	0	0	0	0
Fort Valley State College	0	0	0	0	0	0	0	0
Georgia College and State University	0	0	0	0	0	0	0	0
Georgia Institute of Technology	2,617	157	3	189	79	1,373	0	816
Georgia Southern University	0	0	0	0	0	0	0	0
Georgia State University	0	0	0	0	0	0	0	0
Institute of Paper Science & Technology	76	1	0	5	1	66	0	3
Medical College of Georgia	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table 31. Graduate engineering students in all institutions, by geographic division, State, institution, and citizenship, and by racial/ethnic background of U.S. citizens: 1996

Division, State, and institution	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Georgia, continued:								
Mercer University	112	1	0	6	1	82	2	20
Morehouse School of Medicine	0	0	0	0	0	0	0	0
State University of West Georgia	0	0	0	0	0	0	0	0
University of Georgia	24	0	0	0	1	15	0	8
Valdosta State University	0	0	0	0	0	0	0	0
Maryland	2,089	117	6	179	29	1,029	34	695
Coppin State College	0	0	0	0	0	0	0	0
Frostburg State University	0	0	0	0	0	0	0	0
Hood College	0	0	0	0	0	0	0	0
Johns Hopkins University	283	8	0	27	2	151	6	89
Loyola College	217	18	1	10	2	167	11	8
Morgan State University	0	0	0	0	0	0	0	0
Towson State University	0	0	0	0	0	0	0	0
Uniformed Serv Univ of the Hlth Sciences	0	0	0	0	0	0	0	0
Univ of Maryland - Baltimore County	143	1	0	8	0	92	0	42
University of Baltimore	0	0	0	0	0	0	0	0
University of Maryland - College Park	1,446	90	5	134	25	619	17	556
University of Maryland Eastern Shore	0	0	0	0	0	0	0	0
University of Maryland at Baltimore	0	0	0	0	0	0	0	0
Washington College	0	0	0	0	0	0	0	0
North Carolina	2,094	212	4	131	20	1,111	3	613
Appalachian State University	0	0	0	0	0	0	0	0
Duke University	261	6	0	10	1	149	0	95
East Carolina University	0	0	0	0	0	0	0	0
North Carolina A & T State University	242	134	0	29	3	29	3	44
North Carolina Central University	0	0	0	0	0	0	0	0
North Carolina State University	1,350	65	4	76	13	800	0	392
Univ of North Carolina at Chapel Hill	67	5	0	5	3	42	0	12
Univ of North Carolina at Charlotte	169	2	0	11	0	88	0	68
Univ of North Carolina at Greensboro	0	0	0	0	0	0	0	0
University of North Carolina/Wilmington	0	0	0	0	0	0	0	0
Wake Forest University	5	0	0	0	0	3	0	2
Western Carolina University	0	0	0	0	0	0	0	0
South Carolina	1,027	20	1	38	7	548	24	389
Clemson University	616	19	1	7	4	316	17	252
College of Charleston	0	0	0	0	0	0	0	0
Furman University	0	0	0	0	0	0	0	0
Medical University of South Carolina	0	0	0	0	0	0	0	0
University of South Carolina	411	1	0	31	3	232	7	137
Winthrop University	0	0	0	0	0	0	0	0
Virginia	3,416	130	5	229	55	2,119	9	869
College of William and Mary	56	4	0	5	3	27	0	17
Eastern Virginia Medical School	0	0	0	0	0	0	0	0
George Mason University	524	28	1	78	18	344	0	55
Hampton University	0	0	0	0	0	0	0	0
Hollins College	0	0	0	0	0	0	0	0
Institute of Textile Technology	27	3	0	0	0	24	0	0
James Madison University	0	0	0	0	0	0	0	0
Old Dominion University	374	17	2	9	6	210	9	121
Radford University	0	0	0	0	0	0	0	0
University of Richmond	0	0	0	0	0	0	0	0
University of Virginia	626	26	0	46	2	451	0	101
Virginia Commonwealth University	18	0	0	2	0	6	0	10
Virginia Polytechnic Inst and State Univ	1,791	52	2	89	26	1,057	0	565
Virginia State University	0	0	0	0	0	0	0	0
West Virginia	513	8	0	15	8	266	0	216
Marshall University	0	0	0	0	0	0	0	0
University of Charleston	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table 31. Graduate engineering students in all institutions, by geographic division, State, institution, and citizenship, and by racial/ethnic background of U.S. citizens: 1996

Division, State, and institution	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
West Virginia, continued:								
West Virginia Graduate College	54	0	0	1	1	52	0	0
West Virginia Institute of Technology	26	0	0	0	0	4	0	22
West Virginia University	433	8	0	14	7	210	0	194
East South Central	4,228	203	12	246	43	2,533	40	1,151
Alabama	1,502	86	5	65	16	938	10	382
Alabama A & M University	0	0	0	0	0	0	0	0
Alabama State University	0	0	0	0	0	0	0	0
Auburn University	490	18	0	12	5	284	4	167
Jacksonville State University	0	0	0	0	0	0	0	0
Troy State University in Montgomery	0	0	0	0	0	0	0	0
Tuskegee University	39	22	0	0	0	0	0	17
University of Alabama at Birmingham, The	167	21	0	12	2	116	2	14
University of Alabama in Huntsville, The	411	18	5	14	6	307	0	61
University of Alabama, The	340	6	0	25	3	215	4	87
University of Montevallo	0	0	0	0	0	0	0	0
University of South Alabama	55	1	0	2	0	16	0	36
Kentucky	822	28	3	52	8	494	24	213
Eastern Kentucky University	0	0	0	0	0	0	0	0
Morehead State University	0	0	0	0	0	0	0	0
Murray State University	0	0	0	0	0	0	0	0
Spalding University	0	0	0	0	0	0	0	0
University of Kentucky	355	2	0	18	2	172	24	137
University of Louisville	467	26	3	34	6	322	0	76
Western Kentucky University	0	0	0	0	0	0	0	0
Mississippi	409	19	0	37	5	191	5	152
Jackson State University	0	0	0	0	0	0	0	0
Mississippi State University	307	18	0	25	3	146	3	112
Mississippi University for Women	0	0	0	0	0	0	0	0
University of Mississippi	102	1	0	12	2	45	2	40
University of Southern Mississippi	0	0	0	0	0	0	0	0
Tennessee	1,495	70	4	92	14	910	1	404
Austin Peay State University	0	0	0	0	0	0	0	0
East Tennessee State University	0	0	0	0	0	0	0	0
Fisk University	0	0	0	0	0	0	0	0
Meharry Medical College	0	0	0	0	0	0	0	0
Middle Tennessee State University	0	0	0	0	0	0	0	0
Tennessee State University	59	18	0	2	0	5	1	33
Tennessee Technological University	152	3	0	0	2	76	0	71
University of Memphis	139	3	1	40	3	75	0	17
University of Tennessee at Chattanooga	110	7	0	4	2	72	0	25
University of Tennessee at Knoxville	691	29	2	30	3	500	0	127
University of Tennessee, Memphis	28	1	0	1	2	14	0	10
Vanderbilt University	316	9	1	15	2	168	0	121
West South Central	9,554	220	30	686	460	4,272	273	3,613
Arkansas	629	36	3	23	11	371	10	175
Arkansas State University	0	0	0	0	0	0	0	0
University of Arkansas	629	36	3	23	11	371	10	175
University of Arkansas - Med Sci Campus	0	0	0	0	0	0	0	0
University of Arkansas at Little Rock	0	0	0	0	0	0	0	0
University of Central Arkansas	0	0	0	0	0	0	0	0
Louisiana	1,115	39	2	48	26	426	13	561
Grambling State University	0	0	0	0	0	0	0	0
Louisiana State University	630	23	2	27	14	212	9	343
Louisiana Tech University	191	2	0	3	1	74	0	111
Loyola University New Orleans	0	0	0	0	0	0	0	0
McNeese State University	19	1	0	2	0	14	0	2
Nicholls State University	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table 31. Graduate engineering students in all institutions, by geographic division, State, institution, and citizenship, and by racial/ethnic background of U.S. citizens: 1996

Division, State, and institution	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Louisiana, continued								
Northeast Louisiana University	0	0	0	0	0	0	0	0
Northwestern State University	0	0	0	0	0	0	0	0
Southeastern Louisiana University	0	0	0	0	0	0	0	0
Southern University A & M, All Campuses	0	0	0	0	0	0	0	0
Tulane University	183	11	0	14	11	95	4	48
University of Southwestern Louisiana	92	2	0	2	0	31	0	57
Xavier University of Louisiana	0	0	0	0	0	0	0	0
Oklahoma	1,185	10	10	45	9	476	16	619
East Central University	0	0	0	0	0	0	0	0
Northeastern State University	50	0	0	1	0	42	0	7
Oklahoma State University	539	3	6	25	4	245	0	256
Oral Roberts University	0	0	0	0	0	0	0	0
Southwestern Oklahoma State University	0	0	0	0	0	0	0	0
University of Oklahoma	461	7	4	15	5	162	16	252
University of Tulsa	135	0	0	4	0	27	0	104
Texas	6,625	135	15	570	414	2,999	234	2,258
Abilene Christian University	0	0	0	0	0	0	0	0
Angelo State University	0	0	0	0	0	0	0	0
Baylor College of Dentistry	0	0	0	0	0	0	0	0
Baylor College of Medicine	0	0	0	0	0	0	0	0
Baylor University	0	0	0	0	0	0	0	0
Lamar University-Beaumont	128	1	0	2	5	18	12	90
Midwestern State University	0	0	0	0	0	0	0	0
Prairie View A & M University	54	21	0	12	4	3	14	0
Rice University	204	2	1	17	3	80	0	101
Sam Houston State University	0	0	0	0	0	0	0	0
Southern Methodist University	729	31	2	91	44	498	0	63
Southwest Texas State University	0	0	0	0	0	0	0	0
St. Mary's University	76	0	0	0	7	60	0	11
Stephen F. Austin State University	0	0	0	0	0	0	0	0
Sul Ross State University	0	0	0	0	0	0	0	0
Tarleton State University	0	0	0	0	0	0	0	0
Texas A & M University	1,549	28	3	60	84	657	186	531
Texas A & M University - Corpus Christi	0	0	0	0	0	0	0	0
Texas A & M University-Kingsville	156	0	0	0	39	26	4	87
Texas A&M University-Commerce	0	0	0	0	0	0	0	0
Texas Christian University	0	0	0	0	0	0	0	0
Texas Southern University	0	0	0	0	0	0	0	0
Texas Tech University	357	1	1	4	12	147	7	185
Texas Woman's University	0	0	0	0	0	0	0	0
Trinity University	0	0	0	0	0	0	0	0
U of North TX Hlth Sci Ctr at Ft Worth	0	0	0	0	0	0	0	0
Univ of Texas Hlth Sci Ctr San Antonio	0	0	0	0	0	0	0	0
Univ of Texas Hlth Sci Ctr at Houston	0	0	0	0	0	0	0	0
Univ of Texas M.D. Anderson Cancer Ctr	0	0	0	0	0	0	0	0
Univ of Texas Med Branch at Galveston	0	0	0	0	0	0	0	0
Univ of Texas SW Medical Ctr at Dallas	18	0	0	2	1	6	0	9
Univ of Texas at Arlington	681	13	2	62	15	296	0	293
University of Central Texas	0	0	0	0	0	0	0	0
University of Houston	686	12	1	194	18	297	6	158
University of Houston - Victoria	0	0	0	0	0	0	0	0
University of Houston at Clear Lake City	136	7	0	11	6	105	0	7
University of Incarnate Word	0	0	0	0	0	0	0	0
University of North Texas	27	1	0	0	1	13	1	11
University of Texas - Pan American, The	0	0	0	0	0	0	0	0
University of Texas at Austin	1,274	14	3	72	43	618	4	520
University of Texas at Dallas	175	3	0	29	7	71	0	65
University of Texas at El Paso	245	1	1	5	107	37	0	94
University of Texas at San Antonio	112	0	1	9	17	56	0	29
University of Texas at Tyler	0	0	0	0	0	0	0	0
University of Texas of the Permian Basin	0	0	0	0	0	0	0	0
West Texas A&M University	16	0	0	0	1	11	0	4
Mountain	7,282	75	44	361	273	4,145	293	2,091

See explanatory information, if any, and SOURCE at end of table.

Table 31. Graduate engineering students in all institutions, by geographic division, State, institution, and citizenship, and by racial/ethnic background of U.S. citizens: 1996

Division, State, and institution	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Arizona	1,781	17	10	111	66	756	84	737
Arizona State University	1,152	10	5	57	45	469	50	516
Northern Arizona University	0	0	0	0	0	0	0	0
University of Arizona	629	7	5	54	21	287	34	221
Colorado	2,557	47	17	154	70	1,689	77	503
Colorado School of Mines	256	1	1	11	6	147	0	90
Colorado State University	413	4	1	11	9	254	0	134
National Technological University	658	25	5	60	23	460	20	65
University of Colorado	1,210	17	10	72	32	816	57	206
University of Denver	20	0	0	0	0	12	0	8
University of Northern Colorado	0	0	0	0	0	0	0	0
Idaho	352	2	3	10	5	265	0	67
Idaho State University	62	0	0	2	2	46	0	12
University of Idaho	290	2	3	8	3	219	0	55
Montana	186	0	2	0	2	158	0	24
Montana State University - Bozeman	120	0	1	0	1	95	0	23
Montana Tech of the Univ of Montana	66	0	1	0	1	63	0	1
University of Montana	0	0	0	0	0	0	0	0
Nevada	294	1	1	24	8	148	11	101
University of Nevada at Las Vegas	123	1	1	19	5	64	4	29
University of Nevada at Reno	171	0	0	5	3	84	7	72
New Mexico	838	6	10	11	90	394	71	256
Eastern New Mexico University	0	0	0	0	0	0	0	0
New Mexico Highlands University	0	0	0	0	0	0	0	0
New Mexico Institute of Mining and Tech	62	0	0	0	1	17	0	44
New Mexico State University	290	1	3	4	38	81	69	94
University of New Mexico	486	5	7	7	51	296	2	118
Utah	1,149	2	1	36	29	554	50	377
Brigham Young University	272	0	0	8	7	231	7	19
University of Utah	573	1	0	26	22	278	43	203
Utah State University	304	1	1	2	0	145	0	155
Wyoming	125	0	0	15	3	81	0	26
University of Wyoming	125	0	0	15	3	81	0	26
Pacific	14,815	270	43	2,518	561	5,842	761	4,820
Alaska	170	3	3	10	4	121	5	24
University of Alaska Anchorage	84	1	3	2	3	73	2	0
University of Alaska Southeast	0	0	0	0	0	0	0	0
University of Alaska at Fairbanks	86	2	0	8	1	48	3	24
California	12,200	236	35	2,302	496	4,568	661	3,882
Azusa Pacific University	0	0	0	0	0	0	0	0
Biola University	0	0	0	0	0	0	0	0
Cal Schl of Prof Psych Berkeley/Alameda	0	0	0	0	0	0	0	0
Calif Poly State Univ, San Luis Obispo	136	0	0	6	2	90	0	38
Calif Sch of Prof Psych - Fresno	0	0	0	0	0	0	0	0
Calif Sch of Prof Psych - Los Angeles	0	0	0	0	0	0	0	0
Calif Sch of Prof Psych - San Diego	0	0	0	0	0	0	0	0
Calif State Univ at Dominguez Hills	26	2	0	6	2	9	4	3
Calif State Univ at Fullerton	164	3	0	37	9	47	13	55
Calif State Univ at Los Angeles	109	5	0	47	15	13	12	17
Calif State University at Sacramento	271	10	4	64	33	92	40	28
Calif State University, Stanislaus	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE at end of table

Table 31. Graduate engineering students in all institutions, by geographic division, State, institution, and citizenship, and by racial/ethnic background of U.S. citizens: 1996

Division, State, and institution	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
California, continued:								
California Institute of Integral Studies	0	0	0	0	0	0	0	0
California Institute of Technology	367	2	0	22	12	136	0	195
California State Poly University, Pomona	230	8	1	76	15	78	31	21
California State Univ - Bakersfield	0	0	0	0	0	0	0	0
California State Univ, San Bernadino	0	0	0	0	0	0	0	0
California State University, Chico	10	0	0	1	0	5	1	3
California State University, Fresno	11	0	0	2	0	8	1	0
California State University, Hayward	0	0	0	0	0	0	0	0
California State University, Long Beach	430	9	2	119	32	167	43	58
California State University, Northridge	328	5	0	71	28	161	28	35
Chapman University	0	0	0	0	0	0	0	0
Charles R. Drew Univ of Medicine & Sci	0	0	0	0	0	0	0	0
Claremont Graduate School	0	0	0	0	0	0	0	0
Dominican College of San Rafael	0	0	0	0	0	0	0	0
Fielding Institute, The	0	0	0	0	0	0	0	0
Fuller Theological Seminary	0	0	0	0	0	0	0	0
Golden Gate University	0	0	0	0	0	0	0	0
Harvey Mudd College	5	0	0	1	1	3	0	0
Humboldt State University	57	0	2	2	1	43	8	1
John F Kennedy University	0	0	0	0	0	0	0	0
Loma Linda University	0	0	0	0	0	0	0	0
Loyola Marymount University	86	1	1	27	8	37	9	3
National University	99	5	0	23	6	49	3	13
Northrop University	0	0	0	0	0	0	0	0
Occidental College	0	0	0	0	0	0	0	0
Pacific Graduate School of Psychology	0	0	0	0	0	0	0	0
Pacific States University	0	0	0	0	0	0	0	0
Pepperdine University	0	0	0	0	0	0	0	0
RAND Graduate School of Policy Studies	0	0	0	0	0	0	0	0
San Diego State University	240	2	1	30	29	131	21	26
San Francisco State University	41	1	0	7	4	10	8	11
San Jose State University	783	17	2	316	27	159	90	172
Santa Clara University	414	7	0	121	14	160	43	69
Sonoma State University	0	0	0	0	0	0	0	0
Stanford University	2,315	57	5	329	87	939	81	817
US International University	0	0	0	0	0	0	0	0
US Naval Postgraduate School	442	2	0	24	4	194	1	217
University of Calif at Berkeley	1,520	43	7	241	51	692	70	416
University of Calif at Davis	549	6	2	93	24	257	48	119
University of Calif at Riverside	0	0	0	0	0	0	0	0
University of Calif at San Diego	391	7	1	55	17	189	36	86
University of Calif at San Francisco	30	2	0	9	2	17	0	0
University of Calif at Santa Barbara	396	5	1	30	5	185	13	157
University of Calif at Santa Cruz	70	0	0	12	3	25	8	22
University of California, Irvine	344	2	1	104	8	102	18	109
University of California, Los Angeles	711	9	3	195	23	218	33	230
University of La Verne	0	0	0	0	0	0	0	0
University of Redlands	0	0	0	0	0	0	0	0
University of San Diego	0	0	0	0	0	0	0	0
University of San Francisco	0	0	0	0	0	0	0	0
University of Southern California	1,624	26	2	232	34	351	18	961
University of the Pacific	1	0	0	0	0	1	0	0
West Coast University	0	0	0	0	0	0	0	0
Whittier College	0	0	0	0	0	0	0	0
Wright Institute, The	0	0	0	0	0	0	0	0
Hawaii	219	3	0	51	1	34	1	129
University of Hawaii at Manoa	219	3	0	51	1	34	1	129
Oregon	864	6	1	33	29	366	29	400
Oregon Grad Inst of Science & Technology	60	0	0	6	19	14	1	20
Oregon Health Sciences University	0	0	0	0	0	0	0	0
Oregon State University	543	1	0	18	6	225	13	279
Pacific University	0	0	0	0	0	0	0	0
Portland State University	251	5	1	9	4	123	14	95
Southern Oregon State College	0	0	0	0	0	0	0	0

See explanatory information, if any, and SOURCE at end of table.

Table 31. Graduate engineering students in all institutions, by geographic division, State, institution, and citizenship, and by racial/ethnic background of U.S. citizens: 1996

Division, State, and institution	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Oregon, continued:								
University of Oregon	0	0	0	0	0	0	0	0
University of Portland	10	0	0	0	0	3	1	6
Washington	1,362	22	4	122	31	753	45	385
Central Washington University	0	0	0	0	0	0	0	0
Eastern Washington University	0	0	0	0	0	0	0	0
Gonzaga University	14	0	0	2	0	3	0	9
Pacific Lutheran University	0	0	0	0	0	0	0	0
Saint Martin's College	22	1	0	1	0	20	0	0
Seattle University	108	4	0	14	0	80	9	1
University of Washington -Seattle	920	16	3	92	18	477	34	280
Walla Walla College	0	0	0	0	0	0	0	0
Washington State University	298	1	1	13	13	173	2	95
Western Washington University	0	0	0	0	0	0	0	0
Whitworth College	0	0	0	0	0	0	0	0
Outlying Areas	254	0	0	0	202	0	0	52
Guam	0	0	0	0	0	0	0	0
University of Guam	0	0	0	0	0	0	0	0
Puerto Rico	254	0	0	0	202	0	0	52
Caribbean Center for Advanced Studies	0	0	0	0	0	0	0	0
Ponce School of Medicine	0	0	0	0	0	0	0	0
The Pontifical Cath Univ of Puerto Rico	0	0	0	0	0	0	0	0
Univ of Puerto Rico Mayaguez Campus	254	0	0	0	202	0	0	52
Univ of Puerto Rico Rio Piedras Campus	0	0	0	0	0	0	0	0
University of Puerto Rico Med Sci Campus	0	0	0	0	0	0	0	0

NOTE: Includes medical schools

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 32. Graduate students in science, engineering, and health fields in doctorate-granting institutions, by detailed field: 1989-96

Field	1989	1990	1991	1992	1993	1994	1995	1996
Total, all surveyed fields	385,391	398,848	414,269	433,038	440,972	441,435	435,611	430,631
Total, science and engineering fields	341,080	351,581	364,660	379,876	383,898	380,598	371,965	366,193
Sciences, total	243,717	251,882	259,399	270,718	275,476	275,401	272,343	269,989
Physical sciences, total	31,999	32,489	32,970	33,665	33,559	32,742	31,769	30,787
Astronomy	789	810	829	869	880	973	912	874
Chemistry	17,806	18,124	18,376	18,909	19,066	18,754	18,532	18,298
Physics	13,204	13,346	13,571	13,673	13,405	12,732	12,059	11,382
Physical sciences, n.e.c.	200	209	194	214	208	283	266	233
Earth, atmos., & ocean sci., total	12,594	12,881	13,196	13,841	14,126	14,321	14,139	13,672
Atmospheric sciences	900	925	956	1,076	1,095	1,090	1,062	1,073
Geosciences	7,610	7,243	7,118	7,291	7,352	7,293	7,151	6,871
Oceanography	2,090	2,216	2,274	2,402	2,473	2,678	2,549	2,462
Earth, atmos., & ocean sci., n.e.c.	1,994	2,497	2,848	3,072	3,206	3,260	3,377	3,266
Mathematical sciences, total	17,134	17,543	17,883	18,192	17,719	17,400	16,371	15,951
Mathematics & applied mathematics	14,654	14,912	15,185	15,306	14,742	14,362	13,343	12,959
Statistics	2,480	2,631	2,698	2,886	2,977	3,038	3,028	2,992
Computer sciences	26,840	28,090	28,356	29,812	30,142	28,794	28,182	28,977
Agricultural sciences	10,524	10,607	10,796	11,129	11,168	11,458	11,576	11,181
Biological sciences, total	45,311	46,445	48,179	50,286	52,128	53,698	53,936	53,612
Anatomy	1,078	1,000	1,051	1,030	1,027	1,079	1,056	1,111
Biochemistry	5,041	5,003	5,160	5,332	5,451	5,565	5,461	5,202
Biology	10,082	10,295	10,584	11,036	11,261	11,147	10,962	11,265
Biometry epidemiology	1,722	1,871	2,031	2,365	2,658	2,710	2,812	3,001
Biophysics	655	642	697	751	780	794	845	833
Botany	2,810	2,712	2,673	2,665	2,705	2,741	2,605	2,501
Cell biology	2,234	2,555	2,809	3,093	3,362	3,753	3,874	3,870
Ecology	1,012	1,042	1,079	1,155	1,251	1,420	1,508	1,497
Entomology parasitology	1,181	1,173	1,171	1,193	1,247	1,263	1,241	1,234
Genetics	1,321	1,364	1,478	1,599	1,733	1,649	1,651	1,679
Microbio., immunology, & virology	4,786	4,830	4,890	4,932	5,037	5,114	5,045	4,937
Nutrition	3,829	3,897	3,875	3,810	3,938	4,152	4,350	4,345
Pathology	1,303	1,287	1,378	1,379	1,485	1,603	1,575	1,583
Pharmacology	2,265	2,353	2,432	2,529	2,643	2,830	2,700	2,652
Physiology	2,206	2,236	2,332	2,317	2,372	2,378	2,540	2,377
Zoology	2,069	2,091	2,168	2,117	2,115	2,085	2,063	1,907
Biosciences, n.e.c.	1,717	2,094	2,371	2,983	3,063	3,415	3,648	3,618
Psychology, total	34,409	35,873	37,823	39,208	39,418	39,576	38,945	38,748
Psychology, general	13,836	14,161	13,445	13,370	12,836	12,537	11,985	11,173
Clinical psychology	8,234	8,694	9,512	10,473	10,774	10,774	10,842	11,116
Psychology, n.e.c.	12,339	13,018	14,866	15,365	15,808	16,265	16,118	16,459
Social sciences, total	64,906	67,954	70,196	74,585	77,216	77,412	77,425	77,061
Agricultural economics	2,227	2,232	2,311	2,454	2,334	2,222	2,292	2,085
Anthropology (cultural & social)	5,880	6,210	6,437	6,815	7,064	7,414	7,419	7,485
Economics (except agricultural)	11,337	11,564	11,885	12,346	12,365	12,152	11,885	11,369
Geography	2,905	2,962	3,170	3,473	3,709	3,823	3,792	3,790
History and philosophy of science	304	331	337	360	369	387	401	409
Linguistics	2,976	3,114	3,135	2,930	2,947	2,937	2,857	2,848
Political science	24,228	25,289	26,252	28,168	29,364	28,574	28,284	27,559
Sociology	6,726	7,014	7,425	7,936	8,287	8,300	8,333	8,197
Sociology/anthropology	912	1,077	824	902	841	877	840	850
Social sciences, n.e.c.	7,411	8,161	8,420	9,201	9,936	10,726	11,322	12,469
Engineering, total	97,363	99,799	105,261	109,158	108,422	105,197	99,622	96,204
Aerospace engineering	3,457	3,843	4,053	3,999	3,905	3,653	3,287	3,140
Agricultural engineering	1,043	946	983	1,008	1,018	1,061	1,037	1,012
Biomedical engineering	1,850	2,073	2,191	2,485	2,613	2,674	2,662	2,685
Chemical engineering	6,356	6,599	6,975	7,226	7,358	7,469	7,283	7,232
Civil engineering	14,016	14,515	16,115	17,967	17,945	18,344	17,744	17,193
Electrical engineering	30,665	30,645	32,003	33,024	32,178	30,176	27,915	27,082
Engineering science	2,058	2,002	2,124	2,185	2,148	2,069	1,945	1,741
Industrial/manufacturing eng.	10,162	10,091	11,463	12,319	12,425	12,531	11,925	11,293
Mechanical engineering	15,175	15,669	16,615	17,459	17,404	16,842	15,588	14,713
Metallurgical/materials eng.	4,510	4,836	5,035	5,353	5,216	5,071	4,821	4,643
Mining engineering	388	409	475	426	411	399	362	351
Nuclear engineering	1,323	1,278	1,282	1,286	1,306	1,246	1,154	980
Petroleum engineering	651	656	694	721	711	605	568	545
Engineering, n.e.c.	5,709	6,237	5,253	3,700	3,784	3,057	3,331	3,594

See explanatory information, if any, and SOURCE at end of table.

BEST COPY AVAILABLE

Table 32. Graduate students in science, engineering, and health fields in doctorate-granting institutions, by detailed field: 1989-96

Field	1989	1990	1991	1992	1993	1994	1995	1996
Total, health fields	44,311	47,167	49,609	53,162	57,074	60,837	63,646	64,438
Medical fields, total	9,780	10,478	11,097	11,861	13,224	14,046	14,589	14,510
Anesthesiology	276	329	443	511	494	516	529	647
Cardiology	0	0	2	8	11	14	19	18
Oncology/cancer research	104	113	156	197	209	208	189	185
Endocrinology	82	74	66	71	63	63	53	46
Gastroenterology	0	1	0	0	1	0	0	0
Hematology	4	4	4	5	3	2	1	3
Neurology	744	844	1,003	1,149	1,311	1,455	1,554	1,632
Obstetrics and gynecology	7	5	10	3	3	4	6	4
Ophthalmology	43	37	32	27	19	32	30	33
Otorhinolaryngology	9	4	3	0	1	2	0	0
Pediatrics	136	140	153	154	196	261	238	275
Preventive medicine/community health	7,408	7,911	8,062	8,416	9,470	9,942	10,439	10,128
Psychiatry	67	71	46	96	103	144	158	131
Pulmonary disease	2	0	0	0	0	0	0	0
Radiology	192	196	233	252	287	320	268	227
Surgery	72	65	69	76	92	119	174	167
Clinical medicine, n.e.c.	634	684	815	896	971	964	931	1,014
Other health fields, total	34,531	36,689	38,512	41,301	43,850	46,791	49,057	49,928
Dental sciences	1,004	956	1,016	1,121	1,135	1,199	1,251	1,291
Nursing	17,074	18,468	18,781	19,755	20,608	22,441	23,259	22,094
Pharmaceutical sciences	2,779	2,887	2,967	2,788	2,851	2,890	2,926	2,947
Speech pathology/audiology	6,009	6,271	6,610	7,383	7,858	8,277	8,533	9,019
Veterinary sciences	782	881	875	923	853	858	915	932
Health related, n.e.c.	6,883	7,226	8,263	9,331	10,545	11,126	12,173	13,645

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 33. Graduate students in science, engineering, and health fields in public doctorate-granting institutions, by detailed field: 1989-96

Field	1989	1990	1991	1992	1993	1994	1995	1996
Total, all surveyed fields	266,555	278,208	289,038	302,290	307,280	307,802	303,505	299,421
Total, science and engineering fields	233,410	242,810	251,915	262,562	265,594	263,437	257,628	252,386
Sciences, total	166,391	172,674	177,323	184,737	187,981	188,096	186,063	183,466
Physical sciences, total	22,861	23,358	23,681	24,235	24,238	23,640	23,082	22,274
Astronomy	516	536	546	561	579	591	556	525
Chemistry	12,822	13,004	13,125	13,582	13,752	13,554	13,495	13,275
Physics	9,344	9,630	9,816	9,878	9,699	9,229	8,784	8,247
Physical sciences, n.e.c.	179	188	194	214	208	266	247	227
Earth, atmos., & ocean sci., total	10,363	10,579	10,756	11,308	11,554	11,604	11,712	11,386
Atmospheric sciences	871	897	936	1,051	1,077	1,071	1,037	1,053
Geosciences	6,175	5,852	5,758	5,903	5,951	5,879	5,822	5,611
Oceanography	1,733	1,802	1,841	1,948	1,996	2,119	2,109	2,048
Earth, atmos., & ocean sci., n.e.c.	1,584	2,028	2,221	2,406	2,530	2,535	2,744	2,674
Mathematical sciences	12,943	13,480	13,702	13,896	13,532	13,184	12,290	11,986
Computer sciences	15,527	16,409	16,785	17,427	17,654	17,109	17,069	17,211
Agricultural sciences	10,131	10,164	10,319	10,677	10,731	11,020	11,167	10,777
Biological sciences, total	33,238	33,879	35,014	36,579	37,850	38,906	38,612	38,283
Anatomy	750	715	765	742	760	805	779	793
Biochemistry	3,458	3,452	3,537	3,647	3,666	3,871	3,824	3,692
Biology	6,860	6,973	7,321	7,665	7,884	7,830	7,517	7,785
Biometry/epidemiology	1,017	1,082	1,225	1,562	1,728	1,732	1,724	1,777
Biophysics	382	356	387	417	426	415	472	459
Botany	2,648	2,545	2,505	2,539	2,566	2,621	2,466	2,364
Cell biology	1,260	1,442	1,587	1,824	2,077	2,270	2,342	2,371
Ecology	939	986	991	1,066	1,162	1,314	1,406	1,399
Entomology/parasitology	1,115	1,105	1,102	1,127	1,186	1,193	1,179	1,171
Genetics	936	998	1,058	1,133	1,147	1,083	1,077	1,119
Microbio., immunology, & virology	3,608	3,621	3,555	3,545	3,577	3,611	3,548	3,446
Nutrition	3,185	3,300	3,278	3,194	3,247	3,408	3,535	3,518
Pathology	919	900	987	982	982	1,046	1,023	1,026
Pharmacology	1,542	1,634	1,672	1,757	1,871	1,979	1,872	1,797
Physiology	1,515	1,498	1,530	1,526	1,559	1,521	1,548	1,439
Zoology	1,943	1,957	2,017	1,979	1,976	1,951	1,914	1,780
Biosciences, n.e.c.	1,161	1,315	1,497	1,874	2,036	2,256	2,386	2,347
Psychology	18,402	19,101	19,401	20,208	19,965	19,989	19,950	19,281
Social sciences, total	42,926	45,704	47,665	50,407	52,457	52,644	52,181	52,268
Agricultural economics	2,116	2,117	2,196	2,336	2,222	2,107	2,159	1,999
Anthropology (cultural & social)	4,229	4,468	4,671	4,897	5,160	5,395	5,328	5,390
Economics (except agricultural)	7,159	7,284	7,634	7,938	8,050	7,953	7,675	7,347
Geography	2,719	2,775	2,971	3,170	3,383	3,489	3,498	3,472
Linguistics	1,947	2,104	2,092	2,095	2,112	2,077	2,046	1,973
Political science	14,405	15,594	16,283	17,241	17,872	17,113	16,774	16,268
Sociology	4,960	5,178	5,586	5,856	6,111	6,115	6,128	6,084
Sociology/anthropology	639	709	543	622	652	694	652	669
Social sciences, other	4,752	5,415	5,689	6,252	6,895	7,701	7,921	9,066
Engineering, total	67,019	70,136	74,592	77,825	77,613	75,341	71,565	68,920
Aerospace engineering	2,576	2,957	3,213	3,173	3,102	2,872	2,549	2,399
Agricultural engineering	993	898	943	967	970	1,006	981	959
Biomedical engineering	1,156	1,237	1,282	1,497	1,601	1,601	1,620	1,671
Chemical engineering	4,450	4,739	5,055	5,289	5,408	5,490	5,334	5,243
Civil engineering	10,670	11,024	12,198	13,583	13,542	13,683	13,368	13,035
Electrical engineering	19,050	19,663	20,852	21,870	21,496	20,510	19,206	18,202
Engineering science	1,245	1,214	1,357	1,456	1,419	1,359	1,287	1,246
Industrial/manufacturing eng.	6,512	6,780	7,886	8,646	8,812	8,783	8,165	7,744
Mechanical engineering	10,742	11,264	12,182	13,009	12,898	12,476	11,667	11,129
Metallurgical/materials eng.	2,808	3,113	3,378	3,672	3,646	3,596	3,395	3,266
Nuclear engineering	1,107	1,073	1,093	1,081	1,094	1,062	975	826
Engineering, other	5,710	6,174	5,153	3,582	3,625	2,903	3,018	3,200
Total, health fields	33,145	35,398	37,123	39,728	41,686	44,365	45,877	47,035
Clinical fields	1,163	1,219	1,280	1,456	1,510	1,675	1,630	1,751
Dental sciences	745	746	791	840	862	919	925	992
Nursing	13,147	14,201	14,642	15,426	16,140	17,869	18,349	17,661
Pharmaceutical sciences	2,130	2,218	2,243	2,258	2,349	2,335	2,385	2,429
Preventive medicine/community health	4,732	5,385	5,566	5,758	6,354	6,434	6,843	6,722
Speech pathology/audiology	5,007	5,297	5,590	6,149	6,285	6,629	6,783	7,245
Veterinary sciences	718	821	821	880	802	807	975	894
Other health fields	5,503	5,511	6,190	6,961	7,384	7,697	8,087	9,341

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 34. Graduate students in science, engineering, and health fields in private doctorate-granting institutions, by detailed field: 1989-96

Field	1989	1990	1991	1992	1993	1994	1995	1996
Total, all surveyed fields	118,836	120,640	125,231	130,748	133,692	133,633	132,106	131,210
Total, science and engineering fields	107,670	108,871	112,745	117,314	118,304	117,161	114,337	113,807
Sciences, total	77,326	79,208	82,076	85,981	87,495	87,305	86,280	86,523
Physical sciences, total	9,138	9,131	9,289	9,430	9,321	9,102	8,687	8,513
Astronomy	273	274	283	308	301	382	356	349
Chemistry	4,984	5,120	5,251	5,327	5,314	5,200	5,037	5,023
Physics	3,860	3,716	3,755	3,795	3,706	3,503	3,275	3,135
Physical sciences, n.e.c.	21	21	0	0	0	17	19	6
Earth, atmos., & ocean sci., total	2,231	2,302	2,440	2,533	2,572	2,717	2,427	2,286
Atmospheric sciences	29	28	20	25	18	19	25	20
Geosciences	1,435	1,391	1,360	1,388	1,401	1,414	1,329	1,260
Oceanography	357	414	433	454	477	559	440	414
Earth, atmos., & ocean sci., n.e.c.	410	469	627	666	676	725	633	592
Mathematical sciences	4,191	4,063	4,181	4,296	4,187	4,216	4,081	3,965
Computer sciences	11,313	11,681	11,571	12,385	12,488	11,685	11,113	11,766
Agricultural sciences	393	443	477	452	437	438	409	404
Biological sciences, total	12,073	12,566	13,165	13,707	14,278	14,792	15,324	15,329
Anatomy	328	295	286	288	267	274	277	318
Biochemistry	1,583	1,551	1,623	1,685	1,785	1,694	1,637	1,510
Biology	3,222	3,322	3,263	3,371	3,377	3,317	3,445	3,480
Biometry/epidemiology	705	789	806	803	930	978	1,088	1,224
Biophysics	273	286	310	334	354	379	373	374
Botany	162	167	168	126	139	120	139	137
Cell biology	974	1,113	1,222	1,269	1,285	1,483	1,532	1,499
Ecology	73	56	88	89	89	106	102	98
Entomology/parasitology	66	68	69	66	61	70	62	63
Genetics	385	366	420	466	586	566	574	560
Microbio., immunology, & virology	1,178	1,209	1,335	1,387	1,460	1,503	1,497	1,491
Nutrition	644	597	597	616	691	744	815	827
Pathology	384	387	391	397	503	557	552	557
Pharmacology	723	719	760	772	772	851	828	855
Physiology	691	738	802	791	813	857	992	938
Zoology	126	134	151	138	139	134	149	127
Biosciences, n.e.c.	556	779	874	1,109	1,027	1,159	1,262	1,271
Psychology	16,007	16,772	18,422	19,000	19,453	19,587	18,995	19,467
Social sciences, total	21,980	22,250	22,531	24,178	24,759	24,768	25,244	24,793
Agricultural economics	111	115	115	118	112	115	133	86
Anthropology (cultural & social)	1,651	1,742	1,766	1,918	1,904	2,019	2,091	2,095
Economics (except agricultural)	4,178	4,280	4,251	4,408	4,315	4,199	4,210	4,022
Geography	186	187	199	303	326	334	294	318
Linguistics	1,029	1,010	1,043	835	835	860	811	875
Political science	9,823	9,695	9,969	10,927	11,492	11,461	11,510	11,291
Sociology	1,766	1,836	1,839	2,080	2,176	2,185	2,205	2,113
Sociology/anthropology	273	308	281	280	189	183	188	181
Social sciences, other	2,963	3,077	3,068	3,309	3,410	3,412	3,802	3,812
Engineering, total	30,344	29,663	30,669	31,333	30,809	29,856	28,057	27,284
Aerospace engineering	881	886	840	826	803	781	738	741
Agricultural engineering	50	48	40	41	48	55	56	53
Biomedical engineering	694	836	909	988	1,012	1,073	1,042	1,014
Chemical engineering	1,906	1,860	1,920	1,937	1,950	1,979	1,949	1,989
Civil engineering	3,346	3,491	3,917	4,384	4,403	4,661	4,376	4,158
Electrical engineering	11,615	10,982	11,151	11,154	10,682	9,666	8,709	8,880
Engineering science	813	788	767	729	729	710	658	495
Industrial/manufacturing eng.	3,650	3,311	3,577	3,673	3,613	3,748	3,760	3,549
Mechanical engineering	4,433	4,405	4,433	4,450	4,506	4,366	3,921	3,584
Metallurgical/materials eng.	1,702	1,723	1,657	1,681	1,570	1,475	1,426	1,377
Nuclear engineering	216	205	189	205	212	184	179	154
Engineering, other	1,038	1,128	1,269	1,265	1,281	1,158	1,243	1,290
Total, health fields	11,166	11,769	12,486	13,434	15,388	16,472	17,769	17,403
Clinical fields	465	504	752	840	933	974	966	999
Dental sciences	259	210	225	281	273	280	326	299
Nursing	3,927	4,267	4,139	4,329	4,468	4,572	4,910	4,433
Pharmaceutical sciences	649	669	724	530	502	555	541	518
Preventive medicine/community health	2,676	2,526	2,496	2,658	3,116	3,508	3,596	3,406
Speech pathology/audiology	1,002	974	1,020	1,234	1,573	1,648	1,750	1,774
Veterinary sciences	64	60	54	43	51	51	40	38
Other health fields	2,124	2,559	3,076	3,519	4,472	4,884	5,640	5,936

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 35. Graduate students in science and engineering fields in doctorate-granting institutions, by enrollment status, citizenship, and racial/ethnic background of U.S. citizens: 1989-96

Enrollment status, citizenship, and racial/ethnic background	1989	1990	1991	1992	1993	1994	1995	1996
Total enrollment	341,080	351,681	364,660	379,876	383,898	380,598	371,965	366,193
Total U.S. citizens	247,867	254,415	261,718	275,905	283,188	283,030	277,733	272,666
Black, non-Hispanic	9,118	9,768	10,466	11,860	12,879	13,387	13,894	14,417
American Indian/Alaskan Native	754	919	935	1,029	1,095	1,196	1,269	1,314
Asian/Pacific Islander	13,577	14,802	15,436	18,202	20,593	22,999	22,352	22,493
Hispanic	8,226	8,713	9,408	10,339	11,242	11,198	11,806	12,260
White, non-Hispanic	202,680	208,813	212,849	221,295	223,546	222,653	214,258	208,327
Other or unknown	13,512	11,400	12,624	13,180	13,833	11,597	14,154	13,855
Non-U.S. citizens	93,213	97,266	102,942	103,971	100,710	97,568	94,232	93,527
Full-time enrollment	242,885	250,021	260,743	272,583	275,788	274,901	268,922	265,675
Total U.S. citizens	162,134	165,611	172,057	182,758	189,034	191,201	188,166	184,947
Black, non-Hispanic	5,613	6,015	6,556	7,607	8,390	8,884	9,025	9,172
American Indian/Alaskan Native	508	608	634	742	812	869	952	972
Asian/Pacific Islander	9,182	9,949	10,499	12,364	14,215	16,081	15,628	15,637
Hispanic	5,528	5,912	6,411	6,897	7,443	7,467	8,245	8,412
White, non-Hispanic	134,185	137,615	141,188	147,945	150,398	151,525	146,426	142,956
Other or unknown	7,118	5,512	6,769	7,203	7,776	6,375	7,890	7,798
Non-U.S. citizens	80,751	84,410	88,686	89,825	86,754	83,700	80,756	80,728
Part-time enrollment	98,195	101,660	103,917	107,293	108,110	105,697	103,043	100,518
Total U.S. citizens	85,733	88,804	89,661	93,147	94,154	91,829	89,567	87,719
Black, non-Hispanic	3,505	3,753	3,910	4,253	4,489	4,503	4,869	5,245
American Indian/Alaskan Native	246	311	301	287	283	327	317	342
Asian/Pacific Islander	4,395	4,853	4,937	5,838	6,378	6,918	6,724	6,656
Hispanic	2,698	2,801	2,997	3,442	3,799	3,731	3,561	3,848
White, non-Hispanic	68,495	71,198	71,661	73,350	73,148	71,128	67,832	65,371
Other or unknown	6,394	5,888	5,855	5,977	6,057	5,222	6,264	6,057
Non-U.S. citizens	12,462	12,856	14,256	14,146	13,956	13,868	13,476	12,799

NOTE: For 1991 and earlier years, permanent residents were included under "non-U.S. citizens". Beginning in 1992, permanent residents were included with U.S. citizens.

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 36. Graduate students in science, engineering, and health fields in doctorate-granting institutions, by detailed field, citizenship, and racial/ethnic background of U.S. citizens: 1996

Field	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Total, all surveyed fields	430,631	17,579	1,626	25,933	14,978	256,053	16,281	98,181
Total, science and engineering fields	366,193	14,417	1,314	22,493	12,260	208,327	13,855	93,527
Sciences, total	269,989	11,895	1,102	15,034	9,637	162,798	9,737	59,786
Physical sciences, total	30,787	848	58	1,595	689	15,977	797	10,823
Astronomy	874	14	2	38	13	549	42	216
Chemistry	18,298	572	43	1,015	467	9,726	433	6,042
Physics	11,382	254	13	525	203	5,533	322	4,532
Physical sciences, n.e.c.	233	8	0	17	6	169	0	33
Earth, atmos., & ocean sci., total	13,672	196	53	358	318	9,650	390	2,707
Atmospheric sciences	1,073	15	3	52	12	699	12	280
Geosciences	6,871	64	28	135	126	4,864	212	1,442
Oceanography	2,462	31	11	76	102	1,630	62	550
Earth, atmos., & ocean sci., n.e.c.	3,266	86	11	95	78	2,457	104	435
Mathematical sciences	15,951	523	35	988	329	8,104	482	5,490
Computer sciences	28,977	996	39	3,319	550	12,059	1,548	10,466
Agricultural sciences	11,181	213	41	256	335	7,250	213	2,873
Biological sciences, total	53,612	1,701	178	4,190	1,622	33,198	1,480	11,243
Anatomy	1,111	38	4	111	29	684	20	225
Biochemistry	5,202	115	14	606	108	2,762	112	1,485
Biology	11,265	495	43	670	424	7,312	478	1,843
Biometry/epidemiology	3,001	145	9	324	123	1,740	97	563
Biophysics	833	18	0	109	14	481	36	175
Botany	2,501	64	4	90	55	1,529	52	707
Cell biology	3,870	80	8	346	106	2,456	56	818
Ecology	1,497	12	3	36	51	1,194	39	162
Entomology/parasitology	1,234	16	2	40	43	791	24	313
Genetics	1,679	32	4	119	34	1,068	45	377
Microbio., immunology, & virology	4,937	171	14	429	163	2,978	104	1,078
Nutrition	4,345	159	12	261	142	2,553	93	1,125
Pathology	1,583	30	9	138	39	992	47	328
Pharmacology	2,652	105	8	255	76	1,593	46	569
Physiology	2,377	95	9	318	60	1,390	57	448
Zoology	1,907	18	18	61	39	1,529	13	229
Biosciences, n.e.c.	3,618	108	17	277	116	2,146	161	793
Psychology	38,748	2,171	287	1,424	2,279	29,122	1,715	1,750
Social sciences, total	77,061	5,247	411	2,904	3,515	47,438	3,112	14,434
Agricultural economics	2,085	43	5	53	60	993	38	893
Anthropology (cultural & social)	7,485	242	102	226	311	5,696	241	667
Economics (except agricultural)	11,369	312	16	465	281	4,680	324	5,291
Geography	3,790	85	17	120	73	2,890	139	466
Linguistics	2,848	41	4	155	110	1,500	87	951
Political science	27,559	2,566	113	979	1,538	17,579	1,425	3,359
Sociology	8,197	702	56	387	423	5,353	222	1,054
Sociology/anthropology	850	94	8	11	27	590	35	85
Social sciences, other	12,878	1,162	90	508	692	8,157	601	1,668
Engineering, total	96,204	2,522	212	7,459	2,623	45,529	4,118	33,741
Aerospace engineering	3,140	45	5	151	62	1,546	79	1,252
Agricultural engineering	1,012	17	1	57	19	427	19	472
Biomedical engineering	2,685	84	5	278	59	1,494	71	694
Chemical engineering	7,232	173	30	473	189	3,340	221	2,806
Civil engineering	17,193	431	39	1,061	626	9,230	676	5,130
Electrical engineering	27,082	653	47	3,040	684	10,608	1,260	10,790
Engineering science	1,741	40	3	153	55	934	64	492
Industrial/manufacturing eng	11,293	460	21	668	382	5,871	705	3,186
Mechanical engineering	14,713	347	35	1,003	345	7,132	590	5,261
Metallurgical/materials eng	4,643	99	8	274	87	2,201	83	1,891
Nuclear engineering	980	16	3	46	20	571	14	310
Engineering, other	4,490	157	15	255	95	2,175	336	1,457

See explanatory information, if any, and SOURCE at end of table.

Table 36. Graduate students in science, engineering, and health fields in doctorate-granting institutions, by detailed field, citizenship, and racial/ethnic background of U.S. citizens: 1996

Field	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Total, health fields	64,438	3,162	312	3,440	2,718	47,726	2,426	4,654
Clinical fields	2,750	126	10	325	109	1,812	113	255
Dental sciences	1,291	32	3	104	70	758	16	308
Nursing	22,094	1,123	115	599	695	18,377	824	361
Pharmaceutical sciences	2,947	121	1	231	96	1,261	87	1,150
Preventive medicine/community health	10,128	777	49	1,024	737	6,007	395	1,139
Speech pathology/audiology	9,019	336	40	179	339	7,448	356	312
Veterinary sciences	932	26	4	25	25	552	16	284
Other health fields	15,277	621	81	953	647	11,511	619	845

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 37. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by detailed field: 1989-96

Field	1989	1990	1991	1992	1993	1994	1995	1996
Total, all surveyed fields	266,241	274,821	287,300	301,119	307,063	308,779	305,030	303,586
Total, science and engineering fields	242,885	250,021	260,743	272,583	275,788	274,901	268,922	265,675
Sciences, total	180,388	186,075	191,752	200,569	204,277	205,523	203,232	201,717
Physical sciences, total	28,477	28,824	29,420	30,049	29,922	29,336	28,216	27,276
Astronomy	762	790	810	840	848	953	871	854
Chemistry	15,826	15,982	16,330	16,647	16,794	16,696	16,335	16,054
Physics	11,790	11,951	12,172	12,434	12,162	11,523	10,836	10,221
Physical sciences, n.e.c.	99	101	108	128	118	164	174	147
Earth, atmos., & ocean sci., total	9,625	9,847	9,914	10,475	10,799	10,884	10,728	10,256
Atmospheric sciences	803	828	857	958	978	981	956	979
Geosciences	5,796	5,601	5,526	5,698	5,799	5,776	5,608	5,393
Oceanography	1,752	1,887	1,931	2,061	2,130	2,263	2,163	2,038
Earth, atmos., & ocean sci., n.e.c.	1,274	1,531	1,600	1,758	1,892	1,864	1,981	1,846
Mathematical sciences	13,060	13,245	13,605	13,986	13,804	13,464	12,721	12,298
Computer sciences	14,165	14,837	14,823	15,718	15,792	15,359	15,169	15,547
Agricultural sciences	8,690	8,713	8,850	9,086	9,049	9,124	9,148	8,874
Biological sciences, total	38,925	39,551	41,258	42,812	44,636	46,194	46,376	45,816
Anatomy	999	911	961	960	977	983	978	1,042
Biochemistry	4,793	4,808	4,940	5,030	5,137	5,200	5,134	4,949
Biology	8,007	7,998	8,271	8,427	8,615	8,682	8,538	8,519
Biometry/epidemiology	1,211	1,231	1,431	1,634	1,990	2,056	2,093	2,162
Biophysics	610	605	679	728	755	770	800	807
Botany	2,431	2,341	2,286	2,279	2,351	2,345	2,146	2,128
Cell biology	2,177	2,485	2,716	2,961	3,186	3,592	3,592	3,669
Ecology	866	878	908	976	1,040	1,187	1,276	1,239
Entomology/parasitology	1,009	997	1,014	1,016	1,039	1,066	1,041	1,027
Genetics	1,211	1,255	1,371	1,488	1,640	1,553	1,572	1,605
Microbio., immunology, & virology	4,321	4,361	4,401	4,445	4,600	4,698	4,666	4,531
Nutrition	2,687	2,770	2,820	2,771	2,907	3,069	3,268	3,295
Pathology	1,089	1,055	1,085	1,138	1,264	1,359	1,350	1,339
Pharmacology	2,135	2,222	2,304	2,397	2,499	2,672	2,529	2,499
Physiology	2,057	2,076	2,163	2,160	2,220	2,221	2,376	2,217
Zoology	1,760	1,671	1,750	1,758	1,743	1,712	1,741	1,625
Biosciences, n.e.c.	1,562	1,887	2,148	2,634	2,673	3,029	3,176	3,163
Psychology	24,802	25,482	26,497	27,697	28,184	28,481	28,386	28,447
Social sciences, total	42,644	45,576	47,385	50,746	52,091	52,681	52,488	53,203
Agricultural economics	1,885	1,934	1,976	2,069	1,910	1,992	1,948	1,759
Anthropology (cultural & social)	4,320	4,719	4,977	5,219	5,319	5,718	5,662	5,874
Economics (except agricultural)	8,807	9,011	9,519	9,795	9,757	9,635	9,382	9,232
Geography	2,139	2,166	2,304	2,556	2,745	2,816	2,724	2,732
Linguistics	2,406	2,552	2,510	2,401	2,447	2,420	2,382	2,433
Political science	12,788	13,921	14,535	16,091	16,846	16,396	16,010	16,110
Sociology	5,028	5,415	5,594	6,057	6,159	6,285	6,276	6,156
Sociology anthropology	580	706	583	612	613	644	617	590
Social sciences, other	4,691	5,152	5,387	5,946	6,295	6,875	7,487	8,317
Engineering, total	62,497	63,946	68,991	72,014	71,511	69,378	65,690	63,958
Aerospace engineering	2,742	2,946	3,258	3,269	3,227	2,967	2,668	2,545
Agricultural engineering	861	799	823	840	835	879	859	799
Biomedical engineering	1,571	1,761	1,900	2,138	2,234	2,246	2,277	2,281
Chemical engineering	5,248	5,405	5,733	5,873	5,970	6,027	5,889	5,835
Civil engineering	9,671	9,872	10,988	11,985	11,952	12,155	11,762	11,368
Electrical engineering	17,727	17,918	19,172	20,169	19,623	18,689	17,523	17,361
Engineering science	1,249	1,241	1,357	1,408	1,395	1,343	1,241	1,054
Industrial/manufacturing eng.	4,464	4,480	5,395	5,823	5,665	5,566	5,076	4,938
Mechanical engineering	10,243	10,567	11,396	12,020	12,102	11,624	10,915	10,415
Metallurgical/materials eng.	3,696	3,910	4,038	4,255	4,226	4,084	3,864	3,687
Nuclear engineering	1,112	1,080	1,080	1,084	1,070	997	883	771
Engineering, other	3,913	3,967	3,851	3,150	3,212	2,701	2,733	2,904
Total, health fields	23,356	24,800	26,557	28,536	31,275	33,878	36,108	37,911
Clinical fields	1,364	1,448	1,682	1,873	2,048	2,190	2,171	2,234
Dental sciences	856	827	875	988	1,005	1,048	1,096	1,116
Nursing	5,381	5,553	5,661	5,616	5,964	6,758	7,199	7,210
Pharmaceutical sciences	2,045	2,148	2,198	2,074	2,130	2,188	2,152	2,225
Preventive medicine/community health	4,176	4,445	4,357	4,735	5,225	5,326	5,833	5,697
Speech pathology/audiology	4,533	4,586	5,029	5,584	6,145	6,496	6,556	6,978
Veterinary sciences	649	698	706	743	673	679	719	722
Other health fields	4,352	5,095	6,049	6,923	8,085	9,193	10,382	11,729

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 38. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field and source of support: 1989-96

Field and source of support	1989	1990	1991	1992	1993	1994	1995	1996
Total, all surveyed fields:								
Total, all sources	266,241	274,821	287,300	301,119	307,063	308,779	305,030	303,586
Federal, total	56,460	58,159	61,663	64,221	66,330	66,976	65,854	63,953
Dept. of Defense	9,101	8,794	9,042	9,123	9,633	9,311	9,157	8,621
Dept. of HHS, total	18,402	19,238	20,120	21,104	21,642	22,181	22,275	21,883
NIH	14,264	14,906	15,907	16,967	17,955	18,117	17,961	17,807
Other HHS	4,138	4,332	4,213	4,137	3,687	4,064	4,314	4,076
NSF	11,854	11,974	12,591	13,288	13,405	13,764	13,538	13,336
USDA	2,707	2,684	3,037	3,163	3,271	3,364	3,200	2,946
All other Federal	14,396	15,469	16,873	17,543	18,379	18,356	17,684	17,167
Institutional support	114,858	118,280	120,341	122,488	123,735	123,934	123,972	122,725
Other non-Federal support, total	25,255	25,735	26,653	27,342	26,274	26,792	25,449	24,840
All other U.S.	18,777	19,332	20,092	20,963	20,843	21,130	19,970	19,663
Foreign	6,478	6,403	6,561	6,379	5,431	5,662	5,479	5,177
Self-support	69,668	72,647	78,643	87,068	90,724	91,077	89,755	92,068
Total, science and engineering:								
Total, all sources	242,885	250,021	260,743	272,583	275,788	274,901	268,922	265,675
Federal, total	50,249	51,685	55,135	57,285	59,435	59,775	58,524	57,071
Dept. of Defense	8,737	8,424	8,639	8,742	9,212	8,947	8,831	8,313
Dept. of HHS, total	13,980	14,513	15,371	16,148	16,694	17,032	17,013	16,821
NIH	12,828	13,291	14,073	14,924	15,742	15,841	15,589	15,394
Other HHS	1,152	1,222	1,298	1,224	952	1,191	1,424	1,427
NSF	11,809	11,927	12,537	13,220	13,320	13,656	13,447	13,255
USDA	2,661	2,626	2,977	3,094	3,202	3,297	3,152	2,902
All other Federal	13,062	14,195	15,611	16,081	17,007	16,843	16,081	15,780
Institutional support	108,457	111,594	113,424	115,445	116,277	116,108	115,680	114,386
Other non-Federal support, total	23,882	24,393	25,158	25,674	24,566	24,976	23,521	22,890
All other U.S.	17,873	18,443	19,055	19,751	19,573	19,768	18,561	18,139
Foreign	6,009	5,950	6,103	5,923	4,993	5,208	4,960	4,751
Self-support	60,297	62,349	67,026	74,179	75,510	74,042	71,197	71,328
Sciences, total:								
Total, all sources	180,388	186,075	191,752	200,569	204,277	205,523	203,232	201,717
Federal, total	36,161	37,164	39,347	40,946	42,778	43,256	42,383	41,485
Dept. of Defense	3,933	3,742	3,808	3,836	4,138	4,299	4,099	3,854
Dept. of HHS, total	13,281	13,753	14,564	15,253	15,774	16,130	16,095	15,986
NIH	12,210	12,630	13,352	14,132	14,952	15,063	14,821	14,663
Other HHS	1,071	1,123	1,212	1,121	822	1,067	1,274	1,323
NSF	8,058	8,062	8,272	8,649	8,810	9,049	8,906	8,699
USDA	2,457	2,396	2,703	2,748	2,910	2,964	2,812	2,612
All other Federal	8,432	9,211	10,000	10,460	11,146	10,814	10,471	10,334
Institutional support	86,113	88,751	89,324	91,133	91,862	92,059	92,353	91,448
Other non-Federal support, total	14,019	14,113	14,648	15,255	14,932	15,700	14,500	14,075
All other U.S.	9,965	10,131	10,614	11,326	11,558	12,085	11,170	10,832
Foreign	4,054	3,982	4,034	3,929	3,374	3,615	3,330	3,243
Self-support	44,095	46,047	48,433	53,235	54,705	54,508	53,996	54,709
Physical sciences,:								
Total, all sources	28,477	28,824	29,420	30,049	29,922	29,336	28,216	27,276
Federal, total	10,170	10,213	10,747	10,923	11,014	10,936	10,268	9,801
Dept. of Defense	1,390	1,213	1,225	1,184	1,180	1,309	1,193	1,067
Dept. of HHS, total	2,087	2,081	2,017	2,164	2,135	2,179	2,056	2,049
NIH	1,958	1,937	1,849	2,036	2,026	2,050	1,889	1,783
Other HHS	129	144	168	128	109	129	167	266
NSF	3,605	3,559	3,559	3,594	3,607	3,689	3,574	3,371
USDA	43	54	60	66	60	42	38	43
All other Federal	3,045	3,306	3,886	3,915	4,032	3,717	3,407	3,271
Institutional support	14,743	14,907	14,660	15,003	14,817	14,432	14,428	13,945
Other non-Federal support, total	1,993	1,954	2,205	2,323	2,224	2,300	2,071	2,058
All other U.S.	1,741	1,698	1,906	2,018	1,946	1,994	1,784	1,779
Foreign	252	256	299	305	278	306	287	279
Self-support	1,571	1,750	1,808	1,800	1,867	1,668	1,449	1,472
Earth, atmospheric, & ocean sciences:								
Total, all sources	9,625	9,847	9,914	10,475	10,799	10,884	10,728	10,256
Federal, total	2,878	2,971	3,092	3,403	3,623	3,577	3,441	3,255
Dept. of Defense	435	451	449	472	513	493	408	388
Dept. of HHS, total	25	34	56	49	48	37	33	49
NIH	17	21	23	43	41	36	30	30
Other HHS	8	13	33	6	7	1	3	19
NSF	1,247	1,201	1,217	1,312	1,352	1,393	1,375	1,241
USDA	42	57	69	85	64	61	64	74
All other Federal	1,129	1,228	1,301	1,485	1,646	1,593	1,561	1,503
Institutional support	4,058	4,073	4,105	4,080	4,114	4,126	4,200	4,034
Other non-Federal support, total	966	937	960	989	921	1,014	958	885
All other U.S.	629	667	673	746	729	782	724	669
Foreign	337	270	287	243	192	232	234	216
Self-support	1,723	1,866	1,757	2,003	2,141	2,167	2,129	2,082

See explanatory information, if any, and SOURCE at end of table.

Table 38. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field and source of support: 1989-96

Field and source of support	1989	1990	1991	1992	1993	1994	1995	1996
Mathematical sciences:								
Total, all sources	13,060	13,245	13,605	13,986	13,804	13,464	12,721	12,298
Federal, total	1,198	1,306	1,471	1,460	1,436	1,372	1,264	1,228
Dept. of Defense	394	366	376	385	399	371	321	351
Dept. of HHS, total	36	49	69	118	80	76	87	82
NIH	28	39	64	111	74	68	63	61
Other HHS	8	10	5	7	6	8	24	21
NSF	470	490	450	455	462	509	465	435
USDA	22	23	21	24	27	16	13	9
All other Federal	276	378	555	478	468	400	378	351
Institutional support	9,038	9,149	9,175	9,189	9,027	9,061	8,758	8,498
Other non-Federal support, total	577	552	579	617	504	537	477	545
All other U.S.	340	311	310	348	283	319	290	338
Foreign	237	241	269	269	221	218	187	207
Self-support	2,247	2,238	2,380	2,720	2,837	2,494	2,222	2,027
Computer sciences:								
Total, all sources	14,165	14,837	14,823	15,718	15,792	15,359	15,169	15,547
Federal, total	2,291	2,376	2,499	2,594	2,882	3,007	3,109	3,074
Dept. of Defense	1,162	1,127	1,125	1,170	1,313	1,311	1,390	1,335
Dept. of HHS, total	60	68	71	100	103	97	110	113
NIH	53	61	65	97	95	89	92	80
Other HHS	7	7	6	3	8	8	18	33
NSF	777	818	895	958	1,003	1,040	1,050	1,044
USDA	7	14	8	6	7	9	13	13
All other Federal	285	349	400	360	456	550	546	569
Institutional support	5,056	5,263	5,098	5,249	5,169	5,095	5,157	5,264
Other non-Federal support, total	1,199	1,224	1,275	1,305	1,341	1,342	1,249	1,109
All other U.S.	929	915	957	989	1,089	1,066	1,024	868
Foreign	270	309	318	316	252	276	225	241
Self-support	5,619	5,974	5,951	6,570	6,400	5,915	5,654	6,100
Agricultural sciences:								
Total, all sources	8,690	8,713	8,650	9,086	9,049	9,124	9,148	8,874
Federal, total	1,778	1,739	1,825	1,937	1,940	1,906	2,011	1,927
Dept. of Defense	13	18	26	18	37	35	32	38
Dept. of HHS, total	37	45	45	41	34	48	23	31
NIH	26	40	37	38	32	45	17	17
Other HHS	11	5	8	3	2	3	6	14
NSF	48	65	61	76	76	87	88	95
USDA	1,056	936	1,093	1,088	1,140	1,108	1,172	1,040
All other Federal	624	675	600	714	653	628	696	723
Institutional support	3,382	3,333	3,430	3,504	3,538	3,722	3,758	3,582
Other non-Federal support, total	1,672	1,755	1,708	1,679	1,636	1,652	1,460	1,431
All other U.S.	1,002	1,090	1,052	1,093	1,146	1,137	1,062	1,082
Foreign	670	665	656	586	490	515	398	349
Self-support	1,858	1,886	1,887	1,966	1,935	1,844	1,919	1,934
Biological sciences:								
Total, all sources	38,925	39,551	41,258	42,812	44,636	46,194	46,376	45,816
Federal, total	13,126	13,512	14,365	14,946	16,041	16,582	16,482	16,435
Dept. of Defense	243	222	220	229	269	346	354	358
Dept. of HHS, total	9,566	9,901	10,609	10,986	11,548	11,926	11,995	11,840
NIH	9,216	9,535	10,157	10,572	11,230	11,411	11,323	11,230
Other HHS	350	366	452	414	318	515	672	610
NSF	1,245	1,201	1,269	1,330	1,361	1,369	1,399	1,484
USDA	946	960	1,060	1,078	1,215	1,280	1,078	1,065
All other Federal	1,126	1,228	1,207	1,373	1,648	1,661	1,657	1,688
Institutional support	17,804	18,199	18,575	19,036	19,254	19,890	19,961	19,551
Other non-Federal support, total	3,398	3,514	3,702	3,757	3,835	4,115	3,867	3,706
All other U.S.	2,605	2,789	2,988	3,081	3,254	3,482	3,263	3,149
Foreign	793	725	714	676	581	633	604	557
Self-support	4,597	4,326	4,616	5,023	5,506	5,607	6,065	6,124
Psychology:								
Total, all sources	24,802	25,482	26,497	27,697	28,184	28,481	28,386	28,447
Federal, total	2,079	2,250	2,376	2,454	2,561	2,525	2,466	2,643
Dept. of Defense	113	137	146	135	163	172	174	136
Dept. of HHS, total	1,168	1,261	1,329	1,377	1,412	1,346	1,320	1,497
NIH	712	787	890	941	1,153	1,080	1,089	1,198
Other HHS	456	474	439	436	259	266	231	299
NSF	233	261	267	281	304	287	286	288
USDA	29	37	24	19	15	27	16	5
All other Federal	536	554	610	642	667	693	670	717
Institutional support	10,700	11,035	11,125	11,338	11,975	11,791	11,721	11,823
Other non-Federal support, total	1,092	1,073	1,016	1,072	1,031	1,142	1,072	926
All other U.S.	1,043	1,020	963	1,015	984	1,069	1,029	887
Foreign	49	53	53	57	47	73	43	39
Self-support	10,931	11,124	11,980	12,833	12,617	13,023	13,127	13,055

See explanatory information, if any, and SOURCE at end of table.

Table 38. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field and source of support: 1989-96

Field and source of support	1989	1990	1991	1992	1993	1994	1995	1996
Social sciences:								
Total, all sources	42,644	45,576	47,385	50,746	52,091	52,681	52,488	53,203
Federal, total	2,641	2,797	2,972	3,179	3,281	3,351	3,341	3,122
Dept. of Defense	183	208	241	243	264	262	227	181
Dept. of HHS, total	302	314	368	418	414	421	471	325
NIH	200	210	267	294	301	284	318	264
Other HHS	102	104	101	124	113	137	153	61
NSF	433	467	554	643	645	675	669	741
USDA	312	315	368	382	382	421	418	363
All other Federal	1,411	1,493	1,441	1,493	1,576	1,572	1,556	1,512
Institutional support	21,332	22,792	23,156	23,734	23,968	23,942	24,370	24,751
Other non-Federal support, total	3,122	3,104	3,203	3,513	3,440	3,598	3,346	3,415
All other U.S.	1,676	1,641	1,765	2,036	2,127	2,236	1,994	2,060
Foreign	1,446	1,463	1,438	1,477	1,313	1,362	1,352	1,355
Self-support	15,549	16,883	18,054	20,320	21,402	21,790	21,431	21,915
Engineering, total:								
Total, all sources	62,497	63,946	68,991	72,014	71,511	69,378	65,690	63,958
Federal, total	14,088	14,521	15,788	16,339	16,657	16,519	16,141	15,586
Dept. of Defense	4,804	4,682	4,831	4,906	5,074	4,648	4,732	4,459
Dept. of HHS, total	699	760	807	895	920	902	918	835
NIH	618	661	721	792	790	778	768	731
Other HHS	81	99	86	103	130	124	150	104
NSF	3,751	3,865	4,265	4,571	4,510	4,607	4,541	4,556
USDA	204	230	274	346	292	333	340	290
All other Federal	4,630	4,984	5,611	5,621	5,861	6,029	5,610	5,446
Institutional support	22,344	22,843	24,100	24,312	24,415	24,049	23,327	22,938
Other non-Federal support, total	9,863	10,280	10,510	10,419	9,634	9,276	9,021	8,815
All other U.S.	7,908	8,312	8,441	8,425	8,015	7,683	7,391	7,307
Foreign	1,955	1,968	2,069	1,994	1,619	1,593	1,630	1,508
Self-support	16,202	16,302	18,593	20,944	20,805	19,534	17,201	16,619
Chemical engineering:								
Total, all sources	5,248	5,405	5,733	5,873	5,970	6,027	5,889	5,835
Federal, total	1,457	1,528	1,592	1,643	1,735	1,706	1,740	1,769
Dept. of Defense	130	98	134	123	138	128	164	166
Dept. of HHS, total	87	121	132	166	141	173	163	162
NIH	87	119	128	146	119	143	136	148
Other HHS	0	2	4	20	22	30	27	14
NSF	652	678	663	696	726	747	759	776
USDA	13	27	16	38	52	54	66	34
All other Federal	575	604	647	620	678	604	588	631
Institutional support	1,965	2,087	2,246	2,264	2,312	2,370	2,242	2,134
Other non-Federal support, total	1,271	1,234	1,222	1,163	1,057	1,143	1,071	1,101
All other U.S.	1,178	1,137	1,106	1,067	958	1,039	936	947
Foreign	93	97	116	96	99	104	135	154
Self-support	555	556	673	803	866	808	836	831
Civil engineering:								
Total, all sources	9,671	9,872	10,988	11,985	11,952	12,135	11,762	11,368
Federal, total	1,398	1,452	1,732	1,987	1,936	2,019	1,917	1,843
Dept. of Defense	280	235	273	349	322	315	271	196
Dept. of HHS, total	18	15	32	41	38	45	41	39
NIH	16	11	28	36	30	37	31	33
Other HHS	2	4	4	5	8	8	10	6
NSF	382	424	496	531	513	553	528	534
USDA	33	35	51	68	51	53	53	70
All other Federal	685	743	880	998	1,012	1,053	1,024	1,004
Institutional support	3,848	3,842	4,130	4,324	4,493	4,671	4,780	4,674
Other non-Federal support, total	1,150	1,244	1,323	1,435	1,242	1,219	1,148	1,141
All other U.S.	692	823	912	1,018	969	938	869	898
Foreign	458	421	411	417	273	281	279	243
Self-support	3,275	3,334	3,803	4,239	4,281	4,246	3,917	3,710
Electrical engineering:								
Total, all sources	17,727	17,918	19,172	20,169	19,623	18,689	17,523	17,361
Federal, total	3,419	3,528	3,787	3,981	4,029	3,974	4,004	3,930
Dept. of Defense	1,670	1,636	1,622	1,676	1,731	1,649	1,699	1,647
Dept. of HHS, total	61	77	85	90	103	100	113	93
NIH	45	55	76	81	86	83	84	71
Other HHS	16	22	9	9	17	17	29	22
NSF	1,077	1,130	1,252	1,360	1,260	1,266	1,298	1,298
USDA	14	16	18	24	9	24	33	12
All other Federal	597	669	810	831	926	935	861	860
Institutional support	6,246	6,187	6,453	6,652	6,532	6,230	6,080	6,265
Other non-Federal support, total	2,814	2,941	2,978	2,926	2,746	2,578	2,564	2,627
All other U.S.	2,347	2,422	2,449	2,423	2,311	2,178	2,146	2,252
Foreign	467	519	529	503	435	400	418	375
Self-support	5,248	5,262	5,954	6,610	6,316	5,907	4,875	4,539

See explanatory information, if any, and SOURCE at end of table.

Table 38. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field and source of support: 1989-96

Field and source of support	1989	1990	1991	1992	1993	1994	1995	1996
Industrial engineering:								
Total, all sources	4,464	4,480	5,395	5,823	5,665	5,666	5,076	4,938
Federal, total	575	593	680	634	625	607	626	621
Dept. of Defense	379	296	279	264	244	168	167	208
Dept. of HHS, total	59	60	52	53	78	50	54	49
NIH	25	27	16	22	36	28	27	27
Other HHS	34	33	36	31	42	22	27	22
NSF	125	128	187	165	171	203	172	165
USDA	0	1	5	5	3	1	0	1
All other Federal	112	108	157	147	129	185	233	198
Institutional support	1,596	1,655	1,825	1,817	1,909	1,842	1,787	1,746
Other non-Federal support, total	504	556	490	564	487	548	491	461
All other U.S.	385	405	361	427	398	455	413	364
Foreign	119	151	129	137	89	93	78	97
Self-support	1,789	1,676	2,400	2,808	2,644	2,669	2,172	2,110
Mechanical engineering:								
Total, all sources	10,243	10,567	11,396	12,020	12,102	11,624	10,915	10,415
Federal, total	2,461	2,492	2,695	2,753	2,952	2,882	2,725	2,544
Dept. of Defense	827	735	724	715	777	763	800	708
Dept. of HHS, total	61	69	71	87	86	79	93	76
NIH	54	68	58	77	70	70	82	63
Other HHS	7	1	13	10	16	9	11	13
NSF	632	635	731	786	805	779	734	763
USDA	28	26	29	26	9	10	4	13
All other Federal	913	1,027	1,140	1,139	1,275	1,251	1,094	984
Institutional support	3,792	3,965	4,208	4,303	4,147	4,014	3,824	3,861
Other non-Federal support, total	1,522	1,572	1,665	1,587	1,546	1,551	1,583	1,439
All other U.S.	1,325	1,366	1,394	1,370	1,377	1,313	1,335	1,237
Foreign	197	206	271	217	169	238	253	202
Self-support	2,468	2,538	2,828	3,377	3,457	3,177	2,778	2,571
Other engineering:								
Total, all sources	15,144	15,704	16,307	16,144	16,199	15,217	14,525	14,041
Federal, total	4,778	4,928	5,302	5,341	5,380	5,331	5,129	4,879
Dept. of Defense	1,618	1,682	1,799	1,779	1,862	1,625	1,631	1,534
Dept. of HHS, total	413	418	435	458	474	455	454	416
NIH	391	381	415	430	449	417	408	389
Other HHS	22	37	20	28	25	38	46	27
NSF	883	870	936	1,033	1,035	1,059	1,050	1,020
USDA	116	125	155	185	168	191	184	160
All other Federal	1,748	1,833	1,977	1,886	1,841	2,001	1,810	1,749
Institutional support	4,897	5,107	5,238	4,952	5,022	4,922	4,614	4,258
Other non-Federal support, total	2,602	2,733	2,832	2,744	2,556	2,237	2,159	2,046
All other U.S.	1,981	2,159	2,219	2,120	2,002	1,760	1,692	1,609
Foreign	621	574	613	624	554	477	467	437
Self-support	2,867	2,936	2,935	3,107	3,241	2,727	2,623	2,858
Total, health fields:								
Total, all sources	23,356	24,800	26,557	28,536	31,275	33,878	36,108	37,911
Federal, total	6,211	6,474	6,528	6,936	6,895	7,201	7,330	6,882
Dept. of Defense	364	370	403	381	421	364	326	308
Dept. of HHS, total	4,422	4,725	4,749	4,956	4,948	5,149	5,262	5,062
NIH	1,436	1,615	1,834	2,043	2,213	2,276	2,372	2,413
Other HHS	2,986	3,110	2,915	2,913	2,735	2,873	2,890	2,649
NSF	45	47	54	68	85	108	91	81
USDA	46	58	60	69	69	67	48	44
All other Federal	1,334	1,274	1,262	1,462	1,372	1,513	1,603	1,387
Institutional support	6,401	6,686	6,917	7,043	7,458	7,826	8,292	8,339
Other non-Federal support, total	1,373	1,342	1,495	1,668	1,708	1,816	1,928	1,950
All other U.S.	904	889	1,037	1,212	1,270	1,362	1,409	1,524
Foreign	469	453	458	456	438	454	519	426
Self-support	9,371	10,298	11,617	12,889	15,214	17,035	18,558	20,740

SOURCE: National Science Foundation, SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 39. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field and mechanism of support: 1989-96

Field and mechanism of support	1989	1990	1991	1992	1993	1994	1995	1996
Total, all surveyed fields:								
Total, all types	266,241	274,821	287,300	301,119	307,063	308,779	305,030	303,586
Fellowships	22,936	24,717	26,181	28,024	28,543	28,371	28,331	28,364
Traineeships	14,132	14,802	14,808	14,802	14,837	14,942	15,238	14,676
Research assistantships	77,584	79,043	83,310	86,133	88,087	89,640	87,598	85,373
Teaching assistantships	62,192	62,673	62,860	63,466	65,143	64,664	63,854	63,647
Other types of support	89,397	93,586	100,141	108,694	110,453	111,162	110,009	111,526
Total, science and engineering:								
Total, all types	242,885	250,021	260,743	272,583	275,788	274,901	268,922	265,675
Fellowships	21,274	23,035	24,512	26,193	26,602	26,304	26,203	25,971
Traineeships	9,609	9,947	10,274	9,842	10,062	10,109	10,393	10,127
Research assistantships	74,486	75,816	79,536	82,368	84,348	85,524	83,369	81,281
Teaching assistantships	59,981	60,424	60,498	61,089	62,779	62,009	61,134	60,768
Other types of support	77,535	80,799	85,923	93,091	91,997	90,955	87,823	87,528
Sciences, total:								
Total, all types	180,388	186,075	191,752	200,569	204,277	205,523	203,232	201,717
Fellowships	16,628	17,935	18,852	20,224	20,556	20,417	20,322	20,380
Traineeships	8,624	8,937	9,184	8,855	9,034	9,196	9,394	9,265
Research assistantships	50,114	50,690	53,021	55,085	56,665	57,802	56,607	55,066
Teaching assistantships	49,113	49,741	49,552	50,504	51,877	51,517	51,185	50,956
Other types of support	55,909	58,772	61,143	65,901	66,145	66,591	65,724	66,050
Physical sciences.:								
Total, all types	28,477	28,824	29,420	30,049	29,922	29,336	28,216	27,276
Fellowships	1,922	2,230	2,622	2,797	2,675	2,390	2,304	2,156
Traineeships	580	658	784	694	742	664	672	630
Research assistantships	12,335	12,016	12,088	12,322	12,156	12,216	11,709	11,380
Teaching assistantships	11,463	11,580	11,422	11,633	11,917	11,647	11,424	10,974
Other types of support	2,177	2,340	2,504	2,606	2,432	2,419	2,107	2,136
Earth, atmospheric, & ocean sciences:								
Total, all types	9,625	9,847	9,914	10,475	10,799	10,884	10,728	10,256
Fellowships	745	789	885	888	898	864	883	867
Traineeships	111	84	93	120	153	138	131	131
Research assistantships	4,065	4,097	4,266	4,488	4,615	4,712	4,526	4,201
Teaching assistantships	2,347	2,295	2,257	2,337	2,405	2,391	2,413	2,394
Other types of support	2,357	2,582	2,413	2,642	2,728	2,779	2,775	2,663
Mathematical sciences:								
Total, all types	13,060	13,245	13,605	13,986	13,804	13,464	12,721	12,298
Fellowships	987	1,123	1,350	1,394	1,349	1,203	1,291	1,274
Traineeships	210	181	207	220	258	244	216	177
Research assistantships	1,250	1,267	1,293	1,330	1,349	1,460	1,367	1,231
Teaching assistantships	7,574	7,601	7,497	7,453	7,300	7,308	6,996	6,875
Other types of support	3,039	3,073	3,258	3,589	3,548	3,249	2,851	2,741
Computer sciences:								
Total, all types	14,165	14,837	14,823	15,718	15,792	15,359	15,169	15,547
Fellowships	795	903	864	838	799	888	893	888
Traineeships	125	143	129	141	205	231	204	172
Research assistantships	3,237	3,193	3,430	3,554	3,643	3,737	3,778	3,841
Teaching assistantships	3,345	3,497	3,355	3,402	3,459	3,271	3,273	3,272
Other types of support	6,663	7,101	7,045	7,783	7,686	7,232	7,021	7,374
Agricultural sciences:								
Total, all types	8,590	8,713	8,850	9,086	9,049	9,124	9,148	8,874
Fellowships	492	486	439	455	495	512	448	423
Traineeships	122	111	105	110	153	116	124	121
Research assistantships	4,679	4,674	4,935	5,122	5,183	5,342	5,297	5,105
Teaching assistantships	730	743	749	774	867	872	924	928
Other types of support	2,667	2,699	2,622	2,625	2,351	2,282	2,355	2,297
Biological sciences:								
Total, all types	38,925	39,551	41,258	42,812	44,636	46,194	46,376	45,816
Fellowships	4,397	4,601	4,607	4,982	5,164	5,458	5,286	5,218
Traineeships	4,665	4,851	5,077	4,806	4,876	5,198	5,272	5,329
Research assistantships	14,997	15,572	16,634	17,390	18,579	19,143	18,950	18,351
Teaching assistantships	8,474	8,295	8,334	8,487	8,690	8,884	8,811	8,864
Other types of support	6,392	6,232	6,606	7,147	7,327	7,511	8,057	8,054
Psychology:								
Total, all types	24,802	25,482	26,497	27,697	28,184	28,481	28,386	28,447
Fellowships	1,399	1,588	1,640	1,802	1,881	1,806	1,790	1,905
Traineeships	1,113	1,072	1,117	1,106	1,054	981	1,048	1,089
Research assistantships	3,571	3,700	3,862	3,880	4,140	4,186	4,161	4,219
Teaching assistantships	5,280	5,333	5,303	5,416	5,895	5,680	5,745	5,793
Other types of support	13,439	13,789	14,575	15,493	15,214	15,828	15,642	15,441

See explanatory information, if any, and SOURCE at end of table.

Table 39. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by field and mechanism of support: 1989-96

Field and mechanism of support	1989	1990	1991	1992	1993	1994	1995	1996
Social sciences:								
Total, all types	42,644	45,576	47,385	50,746	52,091	52,681	52,488	53,203
Fellowships	5,891	6,215	6,445	7,068	7,295	7,296	7,427	7,649
Traineeships	1,698	1,837	1,672	1,658	1,593	1,624	1,727	1,616
Research assistantships	5,980	6,171	6,513	6,999	7,000	7,006	6,819	6,738
Teaching assistantships	9,900	10,397	10,635	11,005	11,344	11,464	11,599	11,856
Other types of support	19,175	20,956	22,120	24,016	24,859	25,291	24,916	25,344
Engineering, total:								
Total, all types	62,497	63,946	68,991	72,014	71,511	69,379	65,690	63,958
Fellowships	4,646	5,100	5,660	5,969	6,046	5,887	5,881	5,591
Traineeships	985	1,010	1,090	987	1,028	913	999	862
Research assistantships	24,372	25,126	26,515	27,283	27,683	27,722	26,762	26,215
Teaching assistantships	10,868	10,683	10,946	10,585	10,902	10,492	9,949	9,812
Other types of support	21,626	22,027	24,780	27,190	25,852	24,364	22,099	21,478
Chemical engineering:								
Total, all types	5,248	5,405	5,733	5,873	5,970	6,027	5,889	5,835
Fellowships	646	730	672	710	702	679	762	745
Traineeships	145	147	173	153	123	98	105	93
Research assistantships	2,810	2,838	2,974	3,003	3,104	3,256	3,090	3,029
Teaching assistantships	896	932	993	1,002	1,014	935	906	916
Other types of support	751	758	921	1,005	1,027	1,059	1,026	1,052
Civil engineering:								
Total, all types	9,671	9,872	10,988	11,985	11,952	12,155	11,762	11,368
Fellowships	616	606	674	786	876	860	884	862
Traineeships	200	211	209	213	205	187	187	174
Research assistantships	3,023	3,087	3,538	3,911	4,005	4,187	4,180	4,086
Teaching assistantships	1,680	1,609	1,617	1,596	1,779	1,859	1,806	1,758
Other types of support	4,152	4,359	4,950	5,479	5,087	5,062	4,705	4,488
Electrical engineering:								
Total, all types	17,727	17,918	19,172	20,169	19,623	18,689	17,523	17,361
Fellowships	1,194	1,239	1,386	1,466	1,425	1,456	1,413	1,376
Traineeships	159	157	182	159	169	145	155	152
Research assistantships	6,063	6,189	6,442	6,755	6,856	6,729	6,627	6,845
Teaching assistantships	3,394	3,320	3,359	3,320	3,304	3,128	3,031	3,113
Other types of support	6,917	7,013	7,803	8,469	7,869	7,231	6,297	5,875
Industrial engineering:								
Total, all types	4,464	4,480	5,395	5,823	5,665	5,666	5,076	4,938
Fellowships	207	241	258	257	272	270	298	236
Traineeships	43	36	31	27	47	32	37	14
Research assistantships	1,102	1,114	1,222	1,202	1,236	1,293	1,276	1,244
Teaching assistantships	806	831	873	865	923	908	812	768
Other types of support	2,306	2,258	3,011	3,472	3,187	3,163	2,653	2,676
Mechanical engineering:								
Total, all types	10,243	10,567	11,396	12,020	12,102	11,624	10,915	10,415
Fellowships	566	703	850	874	895	917	922	889
Traineeships	187	177	173	162	210	187	187	165
Research assistantships	4,222	4,276	4,601	4,701	4,726	4,616	4,346	4,195
Teaching assistantships	2,198	2,189	2,149	2,132	2,217	2,019	1,882	1,804
Other types of support	3,070	3,222	3,623	4,151	4,054	3,085	3,578	3,362
Other engineering:								
Total, all types	15,144	15,704	16,307	16,144	16,199	15,21*	14,525	14,041
Fellowships	1,417	1,581	1,820	1,876	1,876	1,705	1,602	1,483
Traineeships	251	282	322	273	274	264	328	264
Research assistantships	7,152	7,622	7,738	7,711	7,756	7,641	7,243	6,816
Teaching assistantships	1,894	1,802	1,955	1,670	1,665	1,643	1,512	1,453
Other types of support	4,430	4,417	4,472	4,614	4,628	3,964	3,840	4,025
Total, health fields:								
Total, all types	23,350	24,900	26,557	28,536	31,275	33,878	36,108	37,911
Fellowships	1,662	1,682	1,669	1,831	1,941	2,067	2,128	2,393
Traineeships	4,523	4,855	4,534	4,960	4,775	4,833	4,845	4,549
Research assistantships	3,098	3,227	3,774	3,765	3,739	4,116	4,229	4,092
Teaching assistantships	2,211	2,249	2,362	2,377	2,364	2,655	2,720	2,879
Other types of support	11,862	12,787	14,218	15,603	18,456	20,207	22,186	23,998

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 40. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by detailed field and mechanism of support: 1996

Field	Total	Fellowships	Trainee-ships	Research assistant-ships	Teaching assistant-ships	Other types of support
Total, all surveyed fields	303,586	28,364	14,676	85,373	63,647	111,526
Total, science and engineering fields	265,675	25,971	10,127	81,281	60,768	87,528
Sciences, total	201,717	20,380	9,265	55,066	50,956	66,050
Physical sciences, total	27,276	2,156	630	11,380	10,974	2,136
Astronomy	854	152	42	391	239	30
Chemistry	16,054	1,158	408	6,472	6,911	1,105
Physics	10,221	846	180	4,470	3,799	926
Physical sciences, n.e.c.	147	0	0	47	25	75
Earth, atmos., & ocean sci., total	10,256	867	131	4,201	2,394	2,663
Atmospheric sciences	979	51	3	638	100	187
Geosciences	5,393	506	62	1,903	1,833	1,089
Oceanography	2,038	213	32	1,163	191	439
Earth, atmos., & ocean sci., n.e.c.	1,846	97	34	497	270	948
Mathematical sciences	12,298	1,274	177	1,231	6,875	2,741
Computer sciences	15,547	888	172	3,841	3,272	7,374
Agricultural sciences	8,874	423	121	5,105	928	2,297
Biological sciences, total	45,816	5,218	5,329	18,351	8,864	8,054
Anatomy	1,042	156	112	430	145	199
Biochemistry	4,949	658	655	2,711	576	349
Biology	8,519	910	499	2,094	3,426	1,590
Biometry/epidemiology	2,162	230	339	484	125	984
Biophysics	807	162	147	382	44	72
Botany	2,128	137	44	1,064	617	266
Cell biology	3,669	557	823	1,670	397	222
Ecology	1,239	145	43	433	429	189
Entomology/parasitology	1,027	56	15	669	151	136
Genetics	1,605	173	321	793	102	216
Microbio., immunology, & virology	4,531	615	737	2,100	597	482
Nutrition	3,295	131	129	1,270	426	1,339
Pathology	1,339	227	118	526	90	378
Pharmacology	2,499	418	569	1,061	205	246
Physiology	2,217	225	332	661	256	743
Zoology	1,625	108	51	454	870	142
Biosciences, n.e.c.	3,163	310	395	1,549	408	501
Psychology	28,447	1,905	1,089	4,219	5,793	15,441
Social sciences, total	53,203	7,649	1,616	6,738	11,856	25,344
Agricultural economics	1,759	112	18	919	183	527
Anthropology, cultural & social	5,874	1,209	133	428	1,330	2,774
Economics (except agricultural)	9,232	1,515	247	1,065	2,737	3,668
Geography	2,732	182	52	558	985	955
Linguistics	2,433	352	65	198	681	1,137
Political science	16,110	2,440	668	1,450	2,768	8,784
Sociology	6,156	933	221	892	2,004	2,106
Sociology/anthropology	590	28	10	108	183	261
Social sciences, other	8,317	878	202	1,120	985	5,132
Engineering, total	63,958	5,591	862	26,215	9,812	21,478
Aerospace engineering	2,545	228	28	1,181	303	805
Agricultural engineering	799	81	6	473	55	184
Biomedical engineering	2,281	349	165	926	171	670
Chemical engineering	5,835	745	93	3,029	916	1,052
Civil engineering	11,368	862	174	4,086	1,758	4,488
Electrical engineering	17,361	1,376	152	6,845	3,113	5,875
Engineering science	1,054	134	7	513	164	236
Industrial/manufacturing eng.	4,938	236	14	1,244	768	2,676
Mechanical engineering	10,415	889	165	4,195	1,804	3,362
Metallurgical/materials eng.	3,687	344	33	2,404	374	532
Nuclear engineering	771	104	14	413	68	172
Engineering, other	2,904	243	11	906	318	1,426
Total, health fields	37,911	2,393	4,549	4,092	2,879	23,998
Clinical fields	2,234	166	320	434	71	1,243
Dental sciences	1,116	148	94	49	239	586
Nursing	7,210	436	1,990	294	338	4,152
Pharmaceutical sciences	2,225	214	61	783	735	432
Preventive medicine/community health	5,697	384	590	584	118	4,021
Speech pathology/audiology	6,978	314	528	492	750	4,894
Veterinary sciences	722	42	48	368	67	197
Other health fields	11,729	689	918	1,088	561	8,473

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 41. Full-time graduate students in science and engineering fields in doctorate-granting institutions, by mechanism and source of support: 1989-96

Mechanism and source of support	1989	1990	1991	1992	1993	1994	1995	1996
Total, all types:								
Total, all sources	242,885	250,021	260,743	272,583	275,788	274,901	268,922	265,675
Federal, total	50,249	51,685	55,135	57,285	59,435	59,775	58,524	57,071
Dept. of Defense	8,737	8,424	8,639	8,742	9,212	8,947	8,831	8,313
Dept. of HHS, total	13,980	14,513	15,371	16,148	16,694	17,032	17,013	16,821
NIH	12,828	13,291	14,073	14,924	15,742	15,841	15,589	15,394
Other HHS	1,152	1,222	1,298	1,224	952	1,191	1,424	1,427
NSF	11,809	11,927	12,537	13,220	13,320	13,656	13,447	13,255
USDA	2,661	2,626	2,977	3,094	3,202	3,297	3,152	2,902
All other Federal	13,062	14,195	15,611	16,081	17,007	16,843	16,081	15,780
Institutional support	108,457	111,594	113,424	115,445	116,277	116,108	115,680	114,386
Other non-Federal support, total	23,882	24,393	25,158	25,674	24,566	24,976	23,521	22,890
All other U.S.	17,873	18,443	19,055	19,751	19,573	19,768	18,561	18,139
Foreign	6,009	5,950	6,103	5,923	4,993	5,208	4,960	4,751
Self-support	60,297	62,349	67,026	74,179	75,510	74,042	71,197	71,328
Fellowships:								
Total, all sources	21,274	23,035	24,512	26,193	26,602	26,304	26,203	25,971
Federal, total	4,546	5,743	6,767	7,086	6,857	6,250	6,224	6,314
Dept. of Defense	388	576	672	645	622	523	469	506
Dept. of HHS, total	595	741	807	979	1,017	1,040	1,153	1,170
NIH	509	665	711	863	903	909	952	970
Other HHS	86	76	96	116	114	131	201	200
NSF	1,753	2,072	2,215	2,339	2,256	2,263	2,305	2,437
USDA	99	100	99	107	110	106	116	101
All other Federal	1,711	2,254	2,974	3,016	2,852	2,318	2,181	2,100
Institutional support	11,198	11,763	12,043	13,074	13,681	13,638	13,995	14,145
Other non-Federal support, total	5,530	5,529	5,702	6,033	6,064	6,416	5,984	5,512
All other U.S.	3,352	3,417	3,501	3,736	3,618	4,013	3,761	3,378
Foreign	2,178	2,112	2,201	2,297	2,446	2,403	2,223	2,134
Self-support	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Traineeships:								
Total, all sources	9,609	9,947	10,274	9,842	10,062	10,109	10,393	10,127
Federal, total	4,575	4,838	5,398	5,472	5,678	5,773	5,593	5,484
Dept. of Defense	92	81	112	86	91	109	104	124
Dept. of HHS, total	3,771	4,024	4,370	4,362	4,344	4,465	4,332	4,250
NIH	3,496	3,716	4,072	4,081	4,160	4,178	3,975	3,984
Other HHS	275	308	298	281	184	287	357	266
NSF	82	45	80	104	161	256	333	428
USDA	45	53	33	28	42	36	17	24
All other Federal	585	635	803	892	1,040	907	807	658
Institutional support	4,185	4,374	4,180	3,598	3,520	3,470	4,121	4,085
Other non-Federal support, total	849	735	696	772	864	866	679	558
All other U.S.	573	497	511	565	575	646	484	376
Foreign	276	238	185	207	289	220	195	182
Self-support	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Research assistantships:								
Total, all sources	74,486	75,816	79,536	82,368	84,348	85,524	83,369	81,281
Federal, total	37,111	36,955	38,959	40,663	42,615	43,370	42,519	41,369
Dept. of Defense	5,853	5,354	5,414	5,656	6,150	6,117	6,174	5,883
Dept. of HHS, total	9,285	9,447	9,887	10,398	10,917	11,176	11,123	10,951
NIH	8,519	8,655	9,028	9,627	10,327	10,461	10,327	10,076
Other HHS	766	792	859	771	590	715	796	875
NSF	9,826	9,653	10,101	10,570	10,675	10,952	10,518	10,168
USDA	2,395	2,353	2,728	2,855	2,930	3,035	2,920	2,677
All other Federal	9,752	10,148	10,829	11,184	11,943	12,090	11,784	11,690
Institutional support	26,131	27,200	28,214	28,772	28,540	29,173	28,673	27,734
Other non-Federal support, total	11,244	11,661	12,363	12,933	13,193	12,981	12,177	12,178
All other U.S.	10,605	10,950	11,560	12,123	12,337	12,218	11,441	11,462
Foreign	639	711	803	810	856	763	736	716
Self-support	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Teaching assistantships:								
Total, all sources	59,981	60,424	60,498	61,089	62,779	62,009	61,134	60,768
Federal, total	401	506	390	547	741	627	624	720
Dept. of Defense	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dept. of HHS, total	112	92	85	164	159	130	111	180
NIH	106	74	72	147	154	121	104	175
Other HHS	6	18	13	17	5	9	7	4
NSF	61	83	64	111	136	98	151	117
USDA	33	44	33	22	39	43	37	41
All other Federal	195	289	208	250	407	356	325	382
Institutional support	59,118	59,431	59,619	60,014	61,472	60,810	59,991	59,442
Other non-Federal support, total	462	485	489	528	566	572	519	606
All other U.S.	462	485	489	528	566	572	519	606
Foreign	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Self-support	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

See explanatory information, if any, and SOURCE at end of table.

Table 41. Full-time graduate students in science and engineering fields in doctorate-granting institutions, by mechanism and source of support: 1989-96

Mechanism and source of support	1989	1990	1991	1992	1993	1994	1995	1996
Other types of support:								
Total, all sources	77,535	80,799	85,923	93,091	91,997	90,955	87,823	87,528
Federal, total	3,616	3,641	3,621	3,517	3,544	3,755	3,564	3,164
Dept. of Defense	2,404	2,413	2,441	2,355	2,349	2,198	2,084	1,800
Dept. of HHS, total	217	209	222	245	257	221	294	270
NIH	198	181	190	206	198	172	231	188
Other HHS	19	28	32	39	59	49	63	82
NSF	87	74	77	96	92	87	140	105
USDA	89	76	84	82	81	77	62	59
All other Federal	819	869	797	739	765	1,172	984	950
Institutional support	7,825	8,826	9,368	9,987	9,064	9,017	8,900	8,980
Other non-Federal support, total	5,797	5,983	5,908	5,408	3,879	4,141	4,162	4,036
All other U.S.	2,881	3,094	2,994	2,799	2,477	2,319	2,356	2,317
Foreign	2,916	2,889	2,914	2,609	1,402	1,822	1,806	1,719
Self-support	60,297	62,349	67,026	74,179	75,510	74,042	71,197	71,328

KEY: N/A = Not applicable

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 42. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by sex, source of support, and field: 1996

Sex and source of support	Total, all surveyed fields	Sciences								
		Sciences, total	Physical sciences	Earth, atmospheric, & ocean sciences	Mathematical sciences	Computer sciences	Agricultural sciences	Biological sciences	Psychology	Social sciences
	Total									
Total, all sources	303,586	201,717	27,276	10,256	12,298	15,547	8,874	45,816	28,447	53,203
Federal, total	63,953	41,485	9,801	3,255	1,228	3,074	1,927	16,435	2,643	3,122
Dept. of Defense	8,621	3,854	1,067	388	351	1,335	36	358	136	181
Dept. of HHS, total	21,883	15,986	2,049	49	82	113	31	11,840	1,497	325
NIH	17,807	14,663	1,783	30	61	80	17	11,230	1,198	264
Other HHS	4,076	1,323	266	19	21	33	14	610	299	61
NSF	13,336	8,699	3,371	1,241	435	1,044	95	1,484	288	741
USDA	2,946	2,612	43	74	9	13	1,040	1,065	5	363
All other Federal	17,167	10,334	3,271	1,503	351	569	723	1,688	717	1,512
Institutional support	122,725	91,448	13,945	4,034	8,498	5,264	3,582	19,551	11,823	24,751
Other non-Federal, total	24,840	14,075	2,058	885	545	1,109	1,431	3,706	926	3,415
All other U.S.	19,663	10,832	1,779	669	338	868	1,082	3,149	887	2,060
Foreign	5,177	3,243	279	216	207	241	349	557	39	1,355
Self-support	92,068	54,709	1,472	2,082	2,027	6,100	1,934	6,124	13,055	21,915
	Men									
Total, all sources	177,527	113,704	19,969	6,642	8,406	11,948	5,604	23,843	8,953	28,339
Federal, total	40,815	25,799	7,427	2,236	933	2,546	1,245	8,745	967	1,700
Dept. of Defense	7,203	3,101	883	308	313	1,147	28	205	74	143
Dept. of HHS, total	10,595	8,442	1,329	28	63	94	22	6,279	505	122
NIH	9,463	7,785	1,152	16	48	74	14	5,972	411	98
Other HHS	1,132	657	177	12	15	20	8	307	94	24
NSF	9,609	5,938	2,617	824	297	829	58	787	128	398
USDA	1,746	1,495	28	45	7	12	655	541	2	205
All other Federal	11,662	6,823	2,570	1,031	253	464	482	933	258	832
Institutional support	73,704	52,087	9,991	2,512	5,824	4,040	2,173	10,236	4,075	13,236
Other non-Federal, total	17,016	8,816	1,493	634	382	901	991	1,994	312	2,109
All other U.S.	13,139	6,459	1,283	462	230	698	715	1,654	293	1,124
Foreign	3,877	2,357	210	172	152	203	276	340	19	985
Self-support	45,992	27,002	1,058	1,260	1,267	4,461	1,195	2,868	3,599	11,294
	Women									
Total, all sources	126,059	88,013	7,307	3,614	3,892	3,599	3,270	21,973	19,494	24,864
Federal, total	23,138	15,686	2,374	1,019	295	528	682	7,690	1,676	1,422
Dept. of Defense	1,418	753	184	80	38	188	10	153	62	38
Dept. of HHS, total	11,288	7,544	720	21	19	19	9	5,561	992	203
NIH	8,344	6,878	631	14	13	6	3	5,258	787	166
Other HHS	2,944	666	89	7	6	13	6	303	205	37
NSF	3,727	2,761	754	417	138	215	37	697	160	343
USDA	1,200	1,117	15	29	2	1	385	524	3	158
All other Federal	5,505	3,511	701	472	98	105	241	755	459	680
Institutional support	49,021	39,361	3,954	1,522	2,674	1,224	1,409	9,315	7,748	11,515
Other non-Federal, total	7,824	5,259	565	251	163	208	440	1,712	614	1,306
All other U.S.	6,524	4,373	496	207	108	170	367	1,495	594	936
Foreign	1,300	886	69	44	55	38	73	217	20	370
Self-support	46,076	27,707	414	822	760	1,639	739	3,256	9,456	10,621

See explanatory information, if any, and SOURCE at end of table.

Table 42. Full-time graduate students in science, engineering, and health fields in doctorate-granting institutions, by sex, source of support, and field: 1996

Sex and source of support	Engineering									Health fields
	Engineering, total	Aerospace engineering	Chemical engineering	Civil engineering	Electrical engineering	Industrial engineering	Mechanical engineering	Metallurgical & materials engineering	Other engineering	
	Total									
Total, all sources	63,958	2,545	5,835	11,368	17,361	4,938	10,415	3,687	7,809	37,911
Federal, total	15,586	1,090	1,769	1,843	3,930	621	2,544	1,597	2,192	6,882
Dept. of Defense	4,459	479	166	196	1,647	208	704	468	587	308
Dept. of HHS, total	835	4	162	39	93	49	76	18	394	5,062
NIH	731	0	148	33	71	27	63	7	382	2,413
Other HHS	104	4	14	6	22	22	13	11	12	2,649
NSF	4,556	101	776	534	1,298	165	763	504	415	81
USDA	290	0	34	70	12	1	13	1	159	44
All other Federal	5,446	506	631	1,004	880	198	984	606	637	1,387
Institutional support	22,938	723	2,134	4,674	6,265	1,746	3,861	1,046	2,489	8,339
Other non-Federal, total	8,815	285	1,101	1,141	2,627	461	1,439	619	1,142	1,950
All other U.S.	7,307	224	947	898	2,252	364	1,237	519	866	1,524
Foreign	1,508	61	154	243	375	97	202	100	276	426
Self-support	16,619	447	831	3,710	4,539	2,110	2,571	425	1,985	20,740
	Men									
Total, all sources	52,564	2,271	4,541	8,636	14,952	3,891	9,260	2,873	6,140	11,259
Federal, total	12,900	974	1,373	1,382	3,418	496	2,230	1,275	1,752	2,116
Dept. of Defense	3,961	449	146	158	1,475	186	646	377	524	141
Dept. of HHS, total	624	3	123	28	68	38	61	16	287	1,529
NIH	539	0	109	24	50	21	50	7	278	1,139
Other HHS	85	3	14	4	18	17	11	9	9	390
NSF	3,622	82	584	380	1,106	125	651	386	308	49
USDA	227	0	30	53	9	1	11	1	122	24
All other Federal	4,466	440	490	763	760	146	861	495	511	373
Institutional support	18,644	632	1,648	3,518	5,352	1,357	3,452	773	1,912	2,973
Other non-Federal, total	7,415	255	864	907	2,306	383	1,297	488	915	785
All other U.S.	6,095	196	740	697	1,978	297	1,115	403	669	585
Foreign	1,320	59	124	210	328	86	182	85	246	200
Self-support	13,605	410	656	2,829	3,876	1,655	2,281	337	1,561	5,385
	Women									
Total, all sources	11,394	274	1,294	2,732	2,409	1,047	1,155	814	1,669	26,652
Federal, total	2,686	116	396	461	512	125	314	322	440	4,766
Dept. of Defense	498	30	20	38	172	22	62	91	63	167
Dept. of HHS, total	211	1	39	11	25	11	15	2	107	3,533
NIH	192	0	39	9	21	6	13	0	104	1,274
Other HHS	19	1	0	2	4	5	2	2	3	2,259
NSF	934	19	192	154	192	40	112	118	107	32
USDA	63	0	4	17	3	0	2	0	37	20
All other Federal	980	66	141	241	120	52	123	111	126	1,014
Institutional support	4,294	91	486	1,156	913	389	409	273	577	5,366
Other non-Federal, total	1,400	30	237	234	321	78	142	131	227	1,165
All other U.S.	1,212	28	207	201	274	67	122	116	197	933
Foreign	188	2	30	33	47	11	20	15	30	226
Self-support	3,014	37	175	881	663	455	290	88	425	15,355

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering.

Table 43. Full-time graduate science, engineering, and health students with U.S. citizenship in doctorate-granting institutions, by detailed field: 1989-96

Field	1989	1990	1991	1992	1993	1994	1995	1996
Total, all surveyed fields	182,308	186,964	194,960	207,695	216,593	221,563	220,738	219,006
Total, science and engineering fields	162,134	165,611	172,057	182,758	189,034	191,201	188,166	184,947
Sciences, total	129,007	132,319	136,214	144,265	149,278	151,560	151,014	149,653
Physical sciences, total	17,651	17,484	17,855	18,396	18,810	18,638	17,930	17,198
Astronomy	604	603	598	621	638	694	646	642
Chemistry	10,258	10,002	10,137	10,517	10,858	10,889	10,649	10,462
Physics	6,710	6,802	7,038	7,163	7,233	6,941	6,503	5,976
Physical sciences, n.e.c.	79	77	82	95	81	114	132	118
Earth, atmos., & ocean sci., total	7,349	7,467	7,390	7,857	8,165	8,067	8,176	7,892
Atmospheric sciences	569	564	569	651	706	731	708	713
Geosciences	4,527	4,277	4,148	4,214	4,295	4,232	4,220	4,101
Oceanography	1,236	1,355	1,368	1,502	1,575	1,602	1,605	1,531
Earth, atmos., & ocean sci., n.e.c.	1,017	1,271	1,305	1,490	1,589	1,502	1,643	1,547
Mathematical sciences	7,248	7,553	7,933	8,460	8,520	8,281	7,755	7,370
Computer sciences	7,777	7,844	7,582	7,983	8,131	7,995	7,843	7,516
Agricultural sciences	6,091	5,928	6,068	6,284	6,276	6,346	6,425	6,343
Biological sciences, total	29,105	29,070	29,807	31,149	32,833	34,542	35,365	35,431
Anatomy	784	709	720	723	738	761	738	825
Biochemistry	3,287	3,185	3,225	3,314	3,408	3,515	3,577	3,518
Biology	6,434	6,366	6,526	6,662	6,901	7,055	6,929	6,920
Biometry/epidemiology	907	889	983	1,147	1,448	1,523	1,593	1,694
Biophysics	402	407	433	479	541	562	602	632
Botany	1,613	1,510	1,439	1,474	1,534	1,607	1,507	1,501
Cell biology	1,700	1,950	2,097	2,269	2,459	2,744	2,903	2,894
Ecology	733	727	758	844	875	1,026	1,122	1,096
Entomology/parasitology	718	699	679	712	718	743	709	742
Genetics	915	965	1,065	1,148	1,274	1,205	1,232	1,242
Microbio., immunology, & virology	3,251	3,217	3,210	3,306	3,372	3,452	3,538	3,504
Nutrition	1,736	1,734	1,711	1,709	1,727	1,979	2,160	2,289
Pathology	813	776	773	818	927	1,027	1,032	1,022
Pharmacology	1,626	1,652	1,672	1,717	1,887	2,045	2,000	1,943
Physiology	1,507	1,495	1,525	1,528	1,623	1,647	1,867	1,797
Zoology	1,492	1,382	1,452	1,474	1,482	1,440	1,513	1,415
Biosciences, n.e.c.	1,187	1,407	1,539	1,825	1,919	2,211	2,343	2,397
Psychology	23,573	24,105	25,002	26,202	26,728	26,845	26,893	26,988
Social sciences, total	30,213	32,868	34,577	37,934	39,815	40,846	40,627	40,915
Agricultural economics	991	1,024	1,041	1,097	1,048	1,083	1,056	982
Anthropology (cultural & social)	3,669	4,026	4,263	4,506	4,651	5,051	5,085	5,297
Economics (except agricultural)	4,431	4,524	4,903	5,126	5,231	5,188	4,866	4,500
Geography	1,733	1,748	1,913	2,141	2,327	2,434	2,333	2,341
Linguistics	1,423	1,501	1,467	1,455	1,555	1,533	1,517	1,577
Political science	10,183	11,311	11,867	13,423	14,194	13,890	13,473	13,270
Sociology	3,674	4,061	4,328	4,811	5,048	5,270	5,384	5,260
Sociology/anthropology	460	573	474	515	541	574	542	525
Social sciences, other	3,649	4,100	4,321	4,860	5,220	5,823	6,371	7,183
Engineering, total	33,127	33,292	35,843	38,493	39,756	39,641	37,152	35,294
Aerospace engineering	1,743	1,834	2,137	2,210	2,144	1,834	1,592	1,402
Agricultural engineering	362	330	330	377	403	438	414	393
Biomedical engineering	1,014	1,184	1,246	1,423	1,544	1,534	1,623	1,657
Chemical engineering	2,656	2,655	2,782	2,921	3,054	3,309	3,261	3,338
Civil engineering	4,898	5,197	5,890	6,676	7,075	7,470	7,241	7,139
Electrical engineering	9,423	9,265	9,565	10,141	9,997	9,995	8,979	8,383
Engineering science	693	734	767	795	822	829	823	628
Industrial/manufacturing eng.	2,326	2,186	2,639	2,945	3,067	3,023	2,692	2,389
Mechanical engineering	5,537	5,635	5,988	6,629	7,071	6,930	6,419	5,869
Metallurgical/materials eng.	1,876	1,976	2,057	2,239	2,253	2,315	2,147	1,970
Nuclear engineering	628	577	590	611	634	618	536	487
Engineering, other	1,971	1,719	1,852	1,526	1,692	1,346	1,425	1,639
Total, health fields	20,174	21,353	22,903	24,937	27,559	30,362	32,572	34,059
Clinical fields	1,122	1,176	1,368	1,502	1,665	1,834	1,919	2,002
Dental sciences	689	643	652	760	769	838	856	835
Nursing	5,219	5,371	5,431	5,414	5,737	6,483	6,915	6,968
Pharmaceutical sciences	1,141	1,189	1,214	1,100	1,176	1,317	1,195	1,173
Preventive medicine/community health	3,309	3,482	3,397	3,898	4,361	4,604	5,112	4,909
Speech pathology/audiology	4,295	4,323	4,749	5,296	5,846	6,205	6,312	6,722
Veterinary sciences	464	501	487	515	459	474	481	459
Other health fields	3,935	4,668	5,605	6,452	7,546	8,607	9,782	10,991

NOTE: For 1991 and earlier years, permanent residents were included under "non-U.S. citizens". Beginning in 1992, permanent residents were included with U.S. citizens.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering.

Table 44. Full-time graduate science, engineering, and health students without U.S. citizenship in doctorate-granting institutions, by detailed field: 1989-96

Field	1989	1990	1991	1992	1993	1994	1995	1996
Total, all surveyed fields	83,933	87,857	92,340	93,424	90,470	87,216	84,292	84,580
Total, science and engineering fields	80,751	84,410	88,686	89,825	86,754	83,700	80,756	80,728
Sciences, total	51,381	53,756	55,538	56,304	54,999	53,963	52,218	52,064
Physical sciences, total	10,826	11,340	11,565	11,653	11,112	10,698	10,286	10,078
Astronomy	158	187	212	219	210	259	225	212
Chemistry	5,568	5,980	6,193	6,130	5,936	5,807	5,686	5,592
Physics	5,080	5,149	5,134	5,271	4,929	4,582	4,333	4,245
Physical sciences, n.e.c.	20	24	26	33	37	50	42	29
Earth, atmos., & ocean sci., total	2,276	2,380	2,524	2,618	2,634	2,817	2,552	2,364
Atmospheric sciences	234	264	288	307	272	250	248	266
Geosciences	1,269	1,324	1,378	1,484	1,504	1,544	1,388	1,292
Oceanography	516	532	563	559	555	661	578	507
Earth, atmos., & ocean sci., n.e.c.	257	260	295	268	303	362	338	299
Mathematical sciences	5,812	5,692	5,672	5,526	5,284	5,183	4,966	4,928
Computer sciences	6,388	6,993	7,241	7,735	7,661	7,364	7,326	8,031
Agricultural sciences	2,599	2,785	2,782	2,802	2,773	2,778	2,723	2,531
Biological sciences, total	9,820	10,481	11,451	11,663	11,803	11,652	11,011	10,385
Anatomy	215	202	241	237	239	222	240	217
Biochemistry	1,506	1,623	1,715	1,716	1,729	1,685	1,557	1,431
Biology	1,573	1,632	1,745	1,765	1,714	1,627	1,609	1,599
Biometry/epidemiology	304	342	448	487	542	533	500	468
Biophysics	208	198	246	249	214	208	198	175
Botany	818	831	847	805	817	738	639	627
Cell biology	477	535	619	692	727	848	789	775
Ecology	133	151	150	132	165	161	154	143
Entomology/parasitology	291	298	335	304	321	323	332	285
Genetics	296	290	306	340	366	348	340	363
Microbio., immunology, & virology	1,070	1,144	1,191	1,139	1,228	1,246	1,128	1,027
Nutrition	951	1,036	1,109	1,062	1,180	1,090	1,108	1,006
Pathology	276	279	312	320	337	332	318	317
Pharmacology	509	570	532	680	612	627	529	556
Physiology	550	581	638	632	597	574	509	420
Zoology	268	289	308	294	261	272	228	210
Biosciences, n.e.c.	375	480	609	809	754	818	833	766
Psychology	1,229	1,377	1,495	1,495	1,456	1,636	1,493	1,459
Social sciences, total	12,431	12,708	12,808	12,812	12,276	11,835	11,861	12,288
Agricultural economics	894	910	935	972	862	809	892	797
Anthropology (cultural & social)	651	693	714	713	668	667	577	577
Economics (except agricultural)	4,376	4,487	4,616	4,669	4,526	4,447	4,516	4,732
Geography	406	418	391	415	418	382	391	391
Linguistics	983	1,051	1,043	946	892	887	865	856
Political science	2,605	2,610	2,668	2,668	2,652	2,506	2,537	2,840
Sociology	1,354	1,354	1,266	1,246	1,111	1,015	892	896
Sociology/anthropology	120	133	109	97	72	70	75	65
Social sciences, other	1,042	1,052	1,066	1,086	1,075	1,052	1,116	1,134
Engineering, total	29,370	30,654	33,148	33,521	31,755	29,737	28,538	28,664
Aerospace engineering	999	1,112	1,121	1,059	1,083	1,133	1,076	1,143
Agricultural engineering	499	469	493	463	432	441	445	406
Biomedical engineering	557	577	654	715	690	712	654	624
Chemical engineering	2,592	2,750	2,951	2,952	2,916	2,718	2,628	2,497
Civil engineering	4,773	4,675	5,098	5,309	4,877	4,685	4,521	4,229
Electrical engineering	8,304	8,653	9,607	10,028	9,626	8,694	8,544	8,978
Engineering science	556	507	590	613	573	514	418	426
Industrial/manufacturing eng.	2,138	2,294	2,756	2,878	2,598	2,643	2,384	2,549
Mechanical engineering	4,706	4,932	5,408	5,391	5,031	4,694	4,496	4,546
Metallurgical/materials eng.	1,820	1,934	1,981	2,016	1,973	1,769	1,717	1,717
Nuclear engineering	484	503	490	473	436	379	347	284
Engineering, other	1,942	2,248	1,999	1,624	1,520	1,355	1,308	1,265
Total, health fields	3,182	3,447	3,654	3,599	3,716	3,516	3,536	3,852
Clinical fields	242	272	314	371	383	356	252	232
Dental sciences	167	184	223	228	236	210	240	281
Nursing	162	182	230	202	227	275	284	242
Pharmaceutical sciences	904	959	984	974	954	871	957	1,052
Preventive medicine/community health	867	963	960	837	864	722	721	788
Speech pathology/audiology	238	263	280	288	299	291	244	256
Veterinary sciences	185	197	219	228	214	205	238	263
Other health fields	417	427	444	471	539	586	600	738

NOTE: For 1991 and earlier years, permanent residents were included under "non-U.S. citizens". Beginning in 1992, permanent residents were included with U.S. citizens.

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering.

Table 45. Graduate students in science and engineering fields in doctorate-granting institutions, ranked by 1996 total graduate science and engineering students: 1989-96

Institutional ranking	1989	1990	1991	1992	1993	1994	1995	1996
Total, all institutions	341,080	351,681	364,660	379,876	383,898	380,598	371,965	366,193
1 University of Michigan*	4,553	4,742	4,772	5,069	5,094	5,067	4,890	4,966
2 Texas A & M University	4,597	4,871	4,962	5,250	5,117	4,788	4,526	4,752
3 University of Minnesota	5,048	5,019	5,148	5,168	5,316	5,072	4,836	4,713
4 University of Wisconsin - Madison	4,902	5,073	5,257	5,412	5,466	5,294	5,044	4,698
5 Univ of Illinois at Urbana-Champaign	4,722	4,814	4,825	4,929	4,998	4,885	4,920	4,573
6 Stanford University	4,099	4,209	4,294	4,490	4,661	4,495	4,526	4,510
7 University of Calif at Berkeley	4,578	4,715	4,516	4,559	4,481	4,430	4,460	4,453
8 University of Colorado	3,373	3,536	3,834	4,175	4,220	4,009	4,067	4,307
9 Massachusetts Institute of Technology	4,237	4,280	4,308	4,342	4,382	4,343	4,206	4,168
10 George Washington University	3,910	4,138	4,207	4,584	4,517	4,532	4,305	4,150
Total, 1st 10 institutions	44,019	45,497	46,123	47,978	48,252	46,915	45,780	45,290
11 University of Southern California	5,987	5,266	5,171	5,399	5,260	4,546	4,272	4,126
12 Pennsylvania State University	4,476	4,128	4,244	4,250	4,261	4,223	4,271	4,054
13 Ohio State University, The	4,319	4,371	4,596	4,607	4,671	4,420	4,332	4,053
14 University of Maryland - College Park	3,794	3,856	3,812	3,899	3,972	4,008	4,024	4,026
15 Rutgers the State Univ of New Jersey	3,848	3,938	3,991	3,975	3,920	3,867	3,802	3,645
16 University of Washington - Seattle	3,573	3,737	3,876	3,783	3,748	3,764	3,757	3,639
17 Virginia Polytechnic Inst and State Univ	3,155	3,194	3,158	3,326	3,381	3,298	3,506	3,572
18 Purdue University	3,751	3,645	3,739	3,871	3,871	3,854	3,718	3,566
19 University of California, Los Angeles	3,106	3,140	3,211	3,271	3,448	3,832	3,626	3,551
20 University of Texas at Austin	4,204	4,306	4,559	4,715	4,722	4,550	4,199	3,549
Total, 1st 20 institutions	83,932	85,078	86,480	89,074	89,506	87,277	85,287	83,071
21 Cornell University	3,326	3,323	3,376	3,700	3,707	3,683	3,640	3,495
22 North Carolina State University	3,050	3,004	3,035	3,230	3,034	3,342	3,405	3,492
23 Georgia Institute of Technology	2,766	2,972	3,326	3,548	3,649	3,688	3,540	3,472
24 University of Florida	2,938	3,052	3,224	3,471	3,583	3,502	3,427	3,362
25 Indiana University	2,405	3,034	3,255	3,458	3,597	3,530	3,505	3,349
26 Louisiana State University	2,229	2,467	2,738	2,916	3,036	3,127	3,184	3,133
27 Harvard University	2,725	2,839	3,032	3,253	3,244	3,231	3,185	3,093
28 Arizona State University	2,594	2,750	2,893	3,156	3,154	3,077	3,080	3,084
29 Michigan State University	2,874	2,828	2,906	3,093	3,171	3,064	3,005	2,981
30 George Mason University	1,869	2,051	2,102	2,218	2,566	2,682	3,101	2,922
Total, 1st 30 institutions	110,808	113,398	116,367	121,117	122,247	120,203	118,359	115,454
31 University of Arizona	3,216	3,126	3,146	3,203	3,248	3,227	3,004	2,898
32 New York University	2,547	2,567	2,702	2,847	2,833	2,668	2,606	2,886
33 University of Kansas	1,736	1,781	1,919	2,015	2,027	2,551	2,459	2,826
34 University of Pittsburgh	2,471	2,696	2,749	3,081	3,067	3,119	2,946	2,761
35 University of Massachusetts	2,565	2,617	2,629	2,626	2,675	2,758	2,757	2,697
36 Iowa State University	2,634	2,707	2,768	2,817	2,876	2,799	2,676	2,693
37 SUNY at Buffalo	2,571	2,747	2,871	2,882	2,911	2,784	2,679	2,505
38 University of Calif at Davis	2,655	2,699	2,563	2,584	2,554	2,495	2,425	2,473
39 Boston University	1,748	2,086	2,162	2,220	2,376	2,496	2,442	2,446
40 Columbia Univ in the City of New York	2,480	2,382	2,413	2,448	2,397	2,411	2,309	2,442
Total, 1st 40 institutions	135,431	138,806	142,289	147,840	149,211	147,511	144,662	142,081
41 Wayne State University	2,431	2,592	2,653	2,786	2,925	2,910	2,694	2,420
42 Univ of North Carolina at Chapel Hill	2,135	2,236	2,180	2,350	2,375	2,344	2,282	2,269
43 University of Cincinnati	1,940	2,084	2,223	2,161	2,175	2,233	2,267	2,183
44 Illinois Institute of Technology	1,510	1,776	1,818	1,916	2,079	1,913	1,542	2,138
45 University of Pennsylvania	2,468	2,465	2,477	2,472	2,456	2,360	2,386	2,104
46 University of Illinois at Chicago	2,268	2,296	2,341	2,404	2,307	2,160	2,088	2,097
47 University of Tennessee at Knoxville	2,392	2,312	2,358	2,458	2,489	2,489	2,283	2,082
48 SUNY at Albany	1,088	1,229	1,328	1,791	1,884	1,760	1,665	2,038
49 American University	1,476	1,559	1,656	2,042	2,305	2,280	2,166	2,034
50 University of Connecticut	1,832	1,980	2,024	2,186	2,218	2,102	2,081	2,004
Total, 1st 50 institutions	154,971	159,335	163,347	170,406	172,424	170,062	166,116	163,450
51 University of Chicago	1,960	1,998	1,859	2,075	2,046	2,153	2,070	1,954
52 SUNY at Stony Brook	1,837	1,843	1,955	2,128	2,131	2,142	2,108	1,953
53 Teachers College, Columbia University	1,491	1,441	1,528	1,533	1,629	1,661	1,741	1,842
54 University of Houston	1,898	2,249	2,920	2,969	2,785	1,985	1,844	1,826
55 University of Calif at San Diego	1,528	1,660	1,804	1,795	1,798	1,781	1,814	1,812
56 Northeastern University	1,872	1,951	2,058	2,094	2,036	1,973	1,815	1,801
57 University of Georgia	1,447	1,501	1,598	1,702	1,781	1,855	1,837	1,798
58 Oregon State University	1,663	1,715	1,759	1,761	1,904	1,887	1,891	1,796
59 University of Nebraska - Lincoln	1,433	1,532	1,721	1,879	1,979	1,982	1,833	1,758
60 Colorado State University	1,668	1,649	1,793	1,882	1,973	1,956	1,927	1,751
Total, 1st 60 institutions	171,768	176,894	182,342	190,224	192,486	189,437	184,996	181,741

See explanatory information, if any, and SOURCE at end of table.

Table 45. Graduate students in science and engineering fields in doctorate-granting institutions, ranked by 1996 total graduate science and engineering students: 1989-96

Institutional ranking	1989	1990	1991	1992	1993	1994	1995	1996
61 University of New Mexico	1,533	1,591	1,625	1,674	1,862	1,817	1,819	1,735
62 University of Hawaii at Manoa	1,525	1,626	1,719	1,667	1,747	1,843	1,763	1,734
63 University of Virginia	1,615	1,830	1,874	1,915	1,923	1,878	1,768	1,731
64 University of Oklahoma	1,659	1,786	1,846	2,015	1,953	1,774	1,703	1,729
65 Oklahoma State University	1,685	1,704	1,794	1,823	1,773	1,747	1,785	1,719
66 Nova Southeastern University	1,069	1,034	1,140	1,237	1,503	1,778	1,808	1,712
67 Kansas State University	1,502	1,495	1,540	1,618	1,732	1,781	1,777	1,709
68 University of Kentucky	1,514	1,572	1,626	1,754	1,731	1,800	1,791	1,708
69 New Jersey Institute of Technology	2,647	2,283	1,848	1,820	1,742	1,664	1,711	1,705
70 Carnegie-Mellon University	1,621	1,671	1,668	1,684	1,664	1,628	1,648	1,700
Total, 1st 70 institutions	188,138	193,486	199,022	207,431	210,116	207,147	202,569	198,923
71 University of South Florida	1,418	1,490	1,526	1,710	1,844	1,743	1,744	1,699
72 University of Utah	1,515	1,602	1,627	1,701	1,695	1,684	1,814	1,690
73 Auburn University	1,436	1,595	1,732	1,772	1,887	1,854	1,849	1,687
74 Johns Hopkins University	1,147	1,167	1,249	1,377	1,389	1,610	1,645	1,677
75 Clemson University	1,402	1,449	1,729	1,910	1,830	1,757	1,686	1,658
76 University of Massachusetts Lowell	1,420	1,841	1,796	1,764	1,552	1,679	1,783	1,646
77 DePaul University	1,261	1,315	1,381	1,359	1,435	1,460	1,467	1,640
78 Northwestern University	1,740	1,738	1,800	1,843	1,799	1,719	1,645	1,638
79 University of Missouri - Columbia	1,689	1,742	1,811	1,821	1,842	1,789	1,743	1,605
80 University of Iowa	1,634	1,721	1,795	1,726	1,746	1,714	1,687	1,601
Total, 1st 80 institutions	202,800	209,146	215,468	224,414	227,135	224,156	219,632	215,464
81 University of Central Florida	914	1,066	1,218	1,352	1,457	1,615	524	1,579
82 University of South Carolina	1,422	1,453	1,466	1,590	1,660	1,649	1,604	1,550
83 Univ of Texas at Arlington	1,710	1,743	1,865	1,936	1,945	1,810	1,609	1,541
84 CUNY Graduate School and Univ Center	1,982	1,991	1,776	1,795	1,664	1,699	1,573	1,529
85 Syracuse University	1,959	1,913	1,928	2,042	1,923	1,817	1,518	1,516
86 Rensselaer Polytechnic Institute	1,795	1,852	2,036	2,040	2,024	1,933	1,694	1,508
87 Yale University	1,690	1,693	1,620	1,581	1,561	1,549	1,539	1,456
88 University of Calif at Santa Barbara	1,382	1,475	1,482	1,526	1,394	1,439	1,444	1,439
89 Antioch University	1,019	1,146	1,531	1,617	1,532	1,590	1,474	1,430
90 Polytechnic University	2,050	1,903	1,600	1,649	1,559	1,438	1,505	1,427
Total, 1st 90 institutions	218,723	225,381	231,990	241,542	243,754	240,695	234,116	230,439
91 Case Western Reserve University	1,482	1,477	1,398	1,439	1,423	1,447	1,422	1,426
92 Drexel University	1,276	1,410	1,534	1,431	1,400	1,534	1,405	1,425
93 University of Delaware	1,179	1,291	1,396	1,429	1,497	1,505	1,493	1,409
94 Washington State University	1,097	1,159	1,255	1,306	1,359	1,421	1,450	1,391
95 Stevens Institute of Technology	1,435	1,333	1,313	1,335	1,416	1,360	1,305	1,390
96 Florida State University	1,324	1,381	1,360	1,335	1,377	1,402	1,506	1,389
97 University of Wisconsin - Milwaukee	1,499	1,544	1,625	1,586	1,538	1,484	1,427	1,384
98 California State University, Long Beach	1,772	1,860	1,940	1,883	1,682	1,486	1,428	1,383
99 University of Akron	1,304	1,315	1,314	1,348	1,321	1,320	1,344	1,369
100 University of California, Irvine	1,175	1,239	1,306	1,445	1,493	1,442	1,392	1,357
Total, 1st 100 institutions	232,266	239,390	246,431	256,079	258,260	255,096	248,288	244,362
101 Western Michigan University	1,214	1,352	1,536	1,543	1,566	1,548	1,326	1,311
102 Duke University	1,229	1,322	1,333	1,335	1,363	1,361	1,337	1,310
103 West Virginia University	1,022	1,154	1,234	1,320	1,443	1,409	1,324	1,285
104 San Diego State University	1,417	1,316	1,371	1,499	1,544	1,473	1,148	1,277
105 Princeton University	1,327	1,334	1,374	1,379	1,367	1,298	1,307	1,266
106 Temple University	1,105	1,078	1,189	1,164	1,241	1,163	1,078	1,264
107 Texas Tech University	1,146	1,254	1,371	1,541	1,487	1,432	1,343	1,264
108 Old Dominion University	978	1,036	1,100	1,077	1,244	1,232	1,237	1,248
109 University of Arkansas	857	911	943	1,027	1,202	1,225	1,321	1,236
110 Utah State University	1,189	1,170	1,187	1,272	1,363	1,370	1,337	1,229
Total, 1st 110 institutions	243,750	251,317	259,069	269,236	272,080	268,607	261,046	257,052
111 Washington University	1,347	1,456	1,353	1,390	1,361	1,339	1,308	1,226
112 Southern Methodist University	952	901	815	950	997	1,031	1,131	1,222
113 Southern Illinois Univ at Carbondale	1,314	1,326	1,365	1,305	1,326	1,304	1,282	1,213
114 University of North Texas	1,117	1,109	1,043	1,329	1,308	1,287	1,230	1,205
115 Brigham Young University	614	586	927	1,016	1,069	1,193	1,154	1,188
116 New Mexico State University	856	883	956	1,271	1,295	1,239	1,208	1,168
117 Vanderbilt University	960	950	965	970	1,026	1,117	1,137	1,154
118 University of Rochester	1,302	1,325	1,349	1,361	1,372	1,305	1,226	1,146
119 Virginia Commonwealth University	963	1,173	1,144	1,160	1,157	1,139	1,213	1,146
120 Mississippi State University	1,079	1,074	1,151	1,150	1,210	1,165	1,119	1,132
Total, 1st 120 institutions	254,254	262,100	270,137	281,138	284,201	280,726	273,054	268,852

See explanatory information, if any, and SOURCE at end of table.

Table 45. Graduate students in science and engineering fields in doctorate-granting institutions, ranked by 1996 total graduate science and engineering students: 1989-96

Institutional ranking	1989	1990	1991	1992	1993	1994	1995	1996
121 University of Louisville	1,082	1,049	1,084	1,132	1,122	1,125	1,099	1,095
122 University of Miami	1,016	1,062	1,150	1,189	1,196	1,252	1,172	1,095
123 Long Island University	623	745	862	1,112	1,142	1,041	1,137	1,089
124 Lehigh University	1,018	764	1,022	1,114	1,099	1,085	999	1,072
125 SUNY at Binghamton	1,120	1,099	1,142	1,141	1,129	1,132	1,093	1,072
126 University of Alabama, The	753	794	882	934	974	963	985	1,070
127 Univ of Puerto Rico Rio Piedras Campus	998	1,100	1,008	1,096	1,138	1,129	1,083	1,065
128 Tufts University	906	888	927	999	1,044	1,061	1,008	1,062
129 Northern Illinois University	747	933	1,023	1,025	1,065	1,097	1,109	1,055
130 Florida International University	577	644	740	783	856	1,036	1,083	1,046
Total, 1st 130 institutions	263,094	271,178	279,977	291,663	294,966	291,647	283,822	279,573
131 University of Texas at Dallas	1,042	1,058	980	1,002	1,017	946	944	1,033
132 New School for Social Research	1,066	984	908	1,164	1,029	1,032	1,008	1,031
133 Portland State University	724	832	968	1,032	1,026	1,061	1,009	1,026
134 Georgia State University	930	943	950	1,025	999	1,097	1,102	1,024
135 California Institute of Technology	1,065	1,088	1,125	1,152	1,131	1,087	1,073	1,022
136 University of Idaho	960	1,048	1,068	1,063	1,115	1,145	1,081	1,018
137 Univ of Maryland - Baltimore County	822	895	1,015	1,040	1,052	1,035	1,027	964
138 University of Toledo	633	668	695	742	754	750	818	963
139 New York Institute of Technology	961	939	887	1,025	997	961	1,013	960
140 Ohio University	929	940	959	970	942	927	921	928
Total, 1st 140 institutions	272,226	280,573	289,532	301,878	305,028	301,688	293,818	289,542
141 Santa Clara University	1,494	1,293	1,222	1,226	1,144	952	945	927
142 US Naval Postgraduate School	1,341	1,377	1,329	1,305	1,280	1,195	1,049	927
143 University of Alabama at Birmingham, The	646	722	759	792	827	815	789	920
144 University of Nevada at Reno	690	766	825	922	911	956	963	918
145 University of Missouri - Rolla	1,231	1,224	1,261	1,216	1,144	1,021	1,016	914
146 Fielding Institute, The	470	473	478	475	513	484	899	905
147 University of Rhode Island	1,081	1,100	1,095	1,149	1,148	1,129	1,096	900
148 Florida Atlantic University	490	695	822	940	1,006	980	920	895
149 University of Notre Dame	752	799	804	872	868	855	859	873
150 Wright State University	732	760	893	909	864	815	845	873
Total, 1st 150 institutions	281,153	289,792	299,020	311,684	314,733	310,890	303,208	298,594
151 Fairleigh Dickinson University	839	912	1,005	1,070	1,020	849	841	871
152 Loyola University of Chicago	480	570	610	633	645	701	794	832
153 Pace University	920	885	855	791	845	808	564	829
154 Tulane University	533	636	751	824	860	897	834	829
155 Oakland University	639	616	678	665	700	706	803	819
156 Wichita State University	615	645	643	742	712	705	761	812
157 Pepperdine University	693	731	935	1,040	1,084	1,039	943	806
158 Kent State University	725	778	807	830	806	811	849	799
159 University of New Hampshire	577	611	634	669	687	660	689	795
160 Colorado School of Mines	679	679	781	889	869	851	806	778
Total, 1st 160 institutions	287,853	296,845	306,719	319,837	322,961	318,917	311,092	306,764
161 University of Memphis	832	819	851	832	885	927	873	773
162 University of Denver	596	937	944	809	831	858	808	768
163 University of Wyoming	750	734	820	835	877	877	818	761
164 Cleveland State University	989	1,044	1,142	1,141	1,160	1,151	1,122	758
165 University of Calif at Riverside	672	711	733	757	763	729	795	757
166 Florida Institute of Technology	1,024	725	882	904	828	801	754	756
167 Brown University	785	769	781	847	797	766	760	733
168 University of Calif at Santa Cruz	555	608	628	671	690	717	732	732
169 Howard University	808	832	739	657	677	761	741	727
170 Rice University	789	800	825	852	844	811	752	723
Total, 1st 170 institutions	295,653	304,824	315,064	328,142	331,313	327,315	319,247	314,252
171 Georgetown University	793	609	633	690	693	744	746	716
172 Emory University	466	595	549	595	649	685	719	713
173 University of Alabama in Huntsville, The	899	934	1,018	939	1,012	926	819	706
174 University of Oregon	776	776	822	845	787	778	771	703
175 Villanova University	902	844	959	938	884	857	758	702
176 Southwest Texas State University	490	559	600	626	656	689	703	698
177 Claremont Graduate School	502	511	552	573	613	683	659	684
178 University of Mississippi	629	620	661	661	659	714	700	682
179 University of Maine	667	660	706	811	783	757	737	666
180 Univ of Puerto Rico Mayaguez Campus	364	358	439	495	524	520	582	663
Total, 1st 180 institutions	302,141	311,290	322,003	335,315	338,573	334,668	326,441	321,185

See explanatory information, if any, and SOURCE at end of table.

Table 45. Graduate students in science and engineering fields in doctorate-granting institutions, ranked by 1996 total graduate science and engineering students: 1989-96

Institutional ranking	1989	1990	1991	1992	1993	1994	1995	1996
181 University of Dayton	706	804	788	739	804	788	651	635
182 Rochester Institute of Technology	747	857	952	1,006	836	776	623	621
183 Calif Sch of Prof Psych - San Diego	480	519	617	592	643	582	573	618
184 Bowling Green State University	556	538	556	591	659	667	708	609
185 University of Southern Mississippi	518	480	442	444	462	548	634	604
186 Worcester Polytechnic Institute	680	725	865	704	712	711	634	603
187 Catholic University of America	709	736	684	736	739	672	602	598
188 Marquette University	599	620	620	596	578	600	556	591
189 Univ of Texas Hlth Sci Ctr at Houston	364	400	428	495	499	541	560	588
190 University of Texas at El Paso	583	624	656	755	667	660	578	588
Total, 1st 190 institutions	308,083	317,593	328,611	341,973	345,232	341,213	332,560	327,240
191 University of Alaska at Fairbanks	444	487	480	571	603	627	600	587
192 North Dakota State University	608	549	599	616	590	606	589	584
193 Yeshiva University	642	565	607	609	561	571	585	579
194 Seton Hall University	164	154	396	413	430	394	610	577
195 Texas Woman's University	614	591	510	518	498	508	503	573
196 University of Vermont	578	594	623	648	632	629	680	570
197 Montana State University - Bozeman	482	451	482	559	626	605	594	569
198 Brandeis University	392	416	428	432	465	473	524	565
199 Illinois State University	482	453	505	550	544	514	549	564
200 Michigan Technological University	442	464	483	510	554	573	584	555
Total, 1st 200 institutions	312,931	322,317	333,724	347,399	350,735	346,713	338,378	332,963
201 University of Montana	435	493	520	588	601	588	593	550
202 Northern Arizona University	726	817	783	763	572	587	572	549
203 Air Force Institute of Technology	548	653	589	588	550	481	514	533
204 University of Nebraska - Omaha	451	474	559	630	631	595	535	526
205 US International University	497	519	492	468	473	419	378	525
206 University of Nevada at Las Vegas	252	266	357	421	495	531	567	521
207 South Dakota State University	320	352	482	485	521	498	499	497
208 Boston College	440	429	464	472	475	493	480	495
209 California Institute of Integral Studies	300	250	362	362	447	416	450	487
210 Ball State University	276	349	335	395	412	436	442	486
Total, 1st 210 institutions	317,176	326,919	338,667	352,571	355,912	351,757	343,408	338,132
211 University of Detroit Mercy	559	529	599	620	596	626	607	484
212 Allegheny Univ. of the Health Sciences	269	340	387	396	409	422	513	482
213 Saint Louis University	392	381	395	438	453	478	479	475
214 Fordham University	470	566	598	584	633	559	500	472
215 University of Missouri - Kansas City	583	590	552	543	490	431	512	470
216 Saint John's University	366	429	457	533	558	556	530	469
217 University of Southwestern Louisiana	490	495	562	583	483	466	429	469
218 Middle Tennessee State University	338	508	529	580	596	557	435	441
219 University of Missouri - St Louis	313	316	281	323	310	425	455	438
220 College of William and Mary	302	334	371	431	432	436	450	434
Total, 1st 220 institutions	321,258	331,407	343,398	357,602	360,872	356,713	348,318	342,766
221 Miami University	428	441	458	460	507	518	483	425
222 Central Michigan University	265	257	292	341	324	353	363	422
223 Calif Sch of Prof Psych - Fresno	235	251	366	385	393	370	399	411
224 Fuller Theological Seminary	295	338	343	352	373	381	416	408
225 SUNY College of Env Science and Forestry	420	455	427	457	428	415	410	395
226 Duquesne University	192	227	222	261	280	382	335	393
227 Golden Gate University	618	354	192	215	157	331	476	381
228 Univ of Texas SW Medical Ctr at Dallas	265	268	284	349	361	385	381	379
229 Tennessee State University	217	249	226	242	216	327	388	375
230 Clark Atlanta University	312	279	323	387	386	418	382	374
Total, 1st 230 institutions	324,505	334,526	346,531	361,051	364,297	360,593	352,351	346,729
231 Cal Schl of Prof Psych Berkeley/Alameda	501	512	519	528	508	455	428	370
232 Sam Houston State University	328	343	362	355	375	386	374	369
233 University of South Alabama	283	311	342	362	318	328	326	367
234 Dartmouth College	352	339	362	381	384	371	363	351
235 Pacific Graduate School of Psychology	347	368	341	373	348	351	314	349
236 Indiana State University	312	252	319	307	330	343	345	346
237 University of Calif at San Francisco	277	288	299	299	315	352	330	338
238 Hofstra University	507	451	402	349	342	356	346	335
239 Baylor University	243	267	284	337	352	363	337	332
240 East Carolina University	276	249	259	343	375	313	333	331
Total, 1st 240 institutions	327,931	337,906	350,020	364,685	367,944	364,211	355,847	350,217

See explanatory information, if any, and SOURCE at end of table.

Table 45. Graduate students in science and engineering fields in doctorate-granting institutions, ranked by 1996 total graduate science and engineering students: 1989-96

Institutional ranking	1989	1990	1991	1992	1993	1994	1995	1996
241 East Tennessee State University	244	253	265	267	311	304	321	325
242 Idaho State University	296	291	264	291	364	374	377	325
243 University of North Dakota	298	292	281	324	339	335	333	324
244 Jackson State University	277	283	251	263	304	332	328	322
245 Caribbean Center for Advanced Studies	213	216	386	299	181	203	325	320
246 Clark University	238	253	275	273	266	261	351	320
247 University of Maryland at Baltimore	317	330	355	360	320	324	285	315
248 University of Tulsa	257	260	280	321	339	346	350	310
249 Tennessee Technological University	285	284	323	336	314	319	323	307
250 Thomas Jefferson University	90	99	183	212	224	249	297	307
Total, 1st 250 institutions	330,446	340,467	352,883	367,631	370,906	367,258	359,137	353,392
251 Louisiana Tech University	248	213	284	364	386	345	303	306
252 Union Institute	438	446	523	381	724	673	512	302
253 Indiana University of Pennsylvania	103	123	140	158	203	301	333	296
254 Lamar University-Beaumont	275	287	401	457	397	349	295	290
255 Finch U of Hlth Sci/The Chicago Med Sch	113	115	124	130	137	133	269	288
256 Univ of North Carolina at Greensboro	282	308	303	351	355	370	305	288
257 University of Hartford	172	207	235	239	288	271	272	288
258 Adelphi University	434	407	380	387	317	271	248	287
259 Baylor College of Medicine	213	239	246	262	279	273	285	284
260 Calif Sch of Prof Psych - Los Angeles	501	585	534	495	537	541	361	280
Total, 1st 260 institutions	333,225	343,397	356,053	370,855	374,529	370,785	362,320	356,301
261 Loma Linda University	111	92	105	150	138	169	194	278
262 Wake Forest University	206	215	229	231	245	290	272	276
263 Marshall University	163	177	204	198	204	224	250	264
264 Florida A & M University	107	102	133	130	177	229	268	251
265 Wright Institute, The	174	207	199	208	221	242	253	248
266 Stephen F. Austin State University	205	200	201	231	230	260	243	247
267 Texas A&M University-Commerce	377	363	346	340	303	245	244	244
268 Medical University of South Carolina	105	146	154	173	192	193	237	238
269 New York Medical College	114	107	160	179	199	241	239	238
270 New Mexico Institute of Mining and Tech	217	245	253	260	255	232	222	233
Total, 1st 270 institutions	335,004	345,251	358,037	372,955	376,693	373,110	364,742	358,818
271 Clarkson University	308	312	286	279	287	254	239	226
272 University of South Dakota	167	221	202	219	207	207	221	225
273 Walden University	0	0	0	0	0	0	0	223
274 Oregon Grad Inst of Science & Technology	148	188	213	291	320	318	287	205
275 Univ of Med and Dentistry of New Jersey	225	217	239	188	204	225	206	197
276 South Dakota School of Mines and Tech	274	259	274	248	219	194	208	196
277 Alabama A & M University	206	240	254	268	312	272	202	194
278 Univ of Texas Hlth Sci Ctr San Antonio	124	130	133	157	163	168	169	182
279 Chicago School of Prof Psych	144	158	134	139	148	159	169	180
280 University of Northern Colorado	147	190	182	224	231	216	166	180
Total, 1st 280 institutions	336,747	347,166	359,954	374,968	378,784	375,123	366,609	360,826
281 CUNY Mt. Sinai School of Medicine	135	146	164	156	170	169	174	178
282 Biola University	173	190	188	156	155	149	146	174
283 Northeast Louisiana University	141	104	101	108	118	147	119	172
284 Alfred University	143	139	115	124	144	174	154	170
285 University of Northern Iowa	51	63	77	74	92	154	173	168
286 Forest Institute of Professional Psych	260	256	206	185	169	162	148	166
287 Medical College of Ohio at Toledo	0	0	0	0	52	227	148	155
288 Mercer University	141	84	113	154	147	147	154	147
289 Andrews University	59	124	131	163	157	139	133	144
290 Texas Christian University	126	131	124	140	149	146	153	142
Total, 1st 290 institutions	337,976	348,403	361,173	376,228	380,137	376,737	368,111	362,442
291 Univ of Texas Med Branch at Galveston	102	97	128	139	145	158	152	140
292 Meharry Medical College	35	47	54	60	69	144	140	139
293 University of Arkansas - Med Sci Campus	52	49	61	75	104	113	124	138
294 Woods Hole Oceanographic Institution	0	92	102	113	112	120	115	137
295 Eastern Virginia Medical School	70	111	118	126	138	156	155	136
296 Oregon Health Sciences University	88	102	118	120	126	138	143	135
297 University of Puerto Rico Med Sci Campus	81	77	113	89	132	128	144	135
298 University of Tennessee, Memphis	106	110	112	131	150	157	156	134
299 Mayo Graduate School	57	94	104	116	120	114	136	133
300 Widener University	178	150	133	143	148	152	145	132
Total, 1st 300 institutions	338,745	349,322	362,216	377,340	381,381	378,117	369,521	363,801

See explanatory information, if any, and SOURCE at end of table.

Table 45. Graduate students in science and engineering fields in doctorate-granting institutions, ranked by 1996 total graduate science and engineering students: 1989-96

Institutional ranking	1989	1990	1991	1992	1993	1994	1995	1996
301 University of La Verne	181	141	125	176	202	118	154	130
302 Creighton University	82	76	71	77	93	53	120	129
303 Spalding University	119	112	107	112	91	115	117	125
304 American International College	155	170	164	169	123	123	124	122
305 Philadelphia Col of Osteopathic Med	0	0	0	0	0	0	85	120
306 Wesleyan University	115	121	128	132	139	143	120	120
307 Medical College of Wisconsin	84	91	107	120	119	126	125	117
308 Bryn Mawr College	116	114	154	123	120	111	115	114
309 Medical College of Georgia	67	78	82	84	88	96	93	100
310 Hampton University	59	58	64	83	90	129	123	98
Total, 1st 310 institutions	339,723	350,283	363,218	378,416	382,446	379,131	370,697	364,976
311 University of Maryland Eastern Shore	62	82	104	115	90	104	89	98
312 Albany Medical College	84	70	70	88	96	95	102	93
313 The Rockefeller University	121	128	128	134	136	132	125	93
314 University of Nebraska Medical Center	72	67	60	69	76	81	84	87
315 Rush University	92	95	90	98	103	100	100	77
316 Institute of Paper Science & Technology	45	57	70	73	77	79	83	76
317 SUNY Health Science Center at Brooklyn	87	94	98	119	104	94	82	75
318 CUNY Herbert H. Lehman College	75	78	61	53	65	72	41	70
319 SUNY Health Science Center at Syracuse	58	50	68	64	72	71	65	68
320 Union College	119	135	144	137	124	98	73	59
Total, 1st 320 institutions	340,538	351,139	364,111	379,366	383,389	380,057	371,541	365,773
321 Uniformed Serv Univ of the Hlth Sciences	92	92	88	71	66	57	58	55
322 University of the Pacific	59	46	59	51	48	54	51	55
323 RAND Graduate School of Policy Studies	60	48	60	55	61	55	56	52
324 University of San Diego	50	52	42	38	47	58	56	51
325 University of Houston - Victoria	29	29	27	28	19	47	34	40
326 Maharishi University of Management	68	77	76	[illegible]	51	48	33	35
327 Institute of Textile Technology	30	30	30	[illegible]	34	29	35	27
328 Philadelphia Coll of Pharmacy and Sci	24	31	29	31	33	29	30	26
329 Morehouse School of Medicine	0	0	0	4	9	21	12	22
330 Mass College of Pharmacy Allied Health	17	25	24	24	20	20	20	20
Total, 1st 330 institutions	340,967	351,569	364,546	379,760	383,777	380,475	371,916	366,156
331 Ponce School of Medicine	22	19	15	13	14	12	16	13
332 The Pontifical Cath Univ of Puerto Rico	0	0	0	0	15	20	20	10
333 Baylor College of Dentistry	0	3	6	7	9	7	9	7
334 Smith College	6	5	6	8	7	4	4	7
335 Atlanta University	0	0	0	0	0	0	0	0
336 Charles R. Drew Univ of Medicine & Sci	0	0	0	0	0	0	0	0
337 Emerson College	0	0	0	0	0	0	0	0
338 Kirksville College of Osteopathic Med	0	0	0	0	0	0	0	0
339 Medical College of Pennsylvania, The	72	72	78	85	73	80	0	0
340 Midwestern University	0	0	0	0	0	0	0	0
Total, 1st 340 institutions	341,067	351,668	364,651	379,873	383,895	380,598	371,965	366,193
341 Oral Roberts University	13	0	0	0	0	0	0	0
342 Pacific University	0	0	0	0	0	0	0	0
343 SUNY College of Optometry	0	0	0	0	0	0	0	0
344 U of North TX Hlth Sci Ctr at Ft Worth	0	0	0	0	0	0	0	0
345 Univ of Osteopathic Med & Health Sci	0	0	0	0	0	0	0	0
346 Univ of Texas M.D. Anderson Cancer Ctr	0	0	0	0	0	0	0	0
347 University of New England	0	13	9	3	3	0	0	0
348 Xavier University of Louisiana	0	0	0	0	0	0	0	0
Total, 1st 348 institutions	341,080	351,681	364,660	379,876	383,898	380,598	371,965	366,193

NOTE: Includes medical schools

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 46. Science, engineering, and health postdoctoral appointees in doctorate-granting institutions, by detailed field: 1989-96

Field	1989	1990	1991	1992	1993	1994	1995	1996
Total, all surveyed fields	27,878	29,515	30,800	32,675	34,248	36,282	35,822	37,019
Total, science and engineering fields	20,864	21,770	22,808	23,825	24,599	25,727	26,073	26,518
Sciences, total	18,952	19,831	20,565	21,474	22,165	23,137	23,445	23,847
Physical sciences, total	5,355	5,565	5,690	5,757	5,636	5,844	5,826	5,802
Astronomy	186	184	210	206	219	246	276	312
Chemistry	3,457	3,630	3,647	3,564	3,555	3,710	3,537	3,568
Physics	1,683	1,723	1,813	1,948	1,823	1,844	1,817	1,836
Physical sciences, n.e.c.	29	28	20	39	39	44	96	86
Earth, atmos., & ocean sci., total	450	591	623	690	762	815	845	861
Atmospheric sciences	58	57	59	64	81	89	88	82
Geosciences	265	343	369	399	423	435	440	449
Oceanography	107	170	161	186	204	237	258	244
Earth, atmos., & ocean sci., n.e.c.	20	21	34	41	54	54	59	86
Mathematical sciences	224	248	206	201	224	229	259	326
Computer sciences	78	71	120	144	164	183	213	247
Agricultural sciences	517	524	565	630	698	705	688	665
Biological sciences, total	11,425	11,930	12,478	13,172	13,785	14,417	14,662	14,918
Anatomy	460	463	509	496	462	503	506	537
Biochemistry	2,216	2,174	2,120	2,157	2,368	2,379	2,399	2,466
Biology	1,278	1,358	1,397	1,475	1,460	1,576	1,601	1,633
Biometry/epidemiology	100	97	100	122	131	128	153	153
Biophysics	138	118	156	176	176	184	230	252
Botany	447	449	488	492	511	590	630	599
Cell biology	966	1,258	1,264	1,308	1,441	1,649	1,764	1,725
Ecology	52	57	49	60	65	88	95	107
Entomology/parasitology	219	212	236	223	223	190	179	183
Genetics	535	614	625	671	665	661	752	719
Microbio., immunology, & virology	1,519	1,469	1,715	1,784	1,881	1,924	1,943	1,975
Nutrition	127	131	171	196	210	192	186	198
Pathology	880	1,018	1,075	1,170	1,202	1,256	1,188	1,220
Pharmacology	1,033	1,104	1,153	1,286	1,327	1,375	1,401	1,418
Physiology	1,067	1,043	1,060	1,139	1,150	1,109	1,026	1,089
Zoology	195	162	161	165	174	171	164	135
Biosciences, n.e.c.	193	203	199	252	339	442	445	509
Psychology	536	464	504	520	518	544	576	584
Social sciences, total	367	438	379	360	378	390	376	444
Agricultural economics	28	57	39	49	46	45	39	56
Anthropology (cultural & social)	74	64	51	59	52	57	67	74
Economics (except agricultural)	33	37	40	22	38	46	27	16
Geography	22	19	15	22	28	26	16	22
Linguistics	30	38	14	26	29	20	16	36
Political science	41	66	78	49	35	44	36	35
Sociology	75	94	90	72	72	78	91	127
Sociology/anthropology	0	2	1	3	5	4	0	0
Social sciences, other	64	61	51	58	73	70	84	78
Engineering, total	1,912	1,939	2,243	2,351	2,434	2,590	2,628	2,671
Aerospace engineering	38	67	77	92	116	100	101	117
Agricultural engineering	39	33	35	37	39	45	46	48
Biomedical engineering	69	72	61	81	85	141	134	143
Chemical engineering	466	550	568	535	526	521	569	542
Civil engineering	182	168	185	187	181	210	200	230
Electrical engineering	193	241	339	313	383	407	378	393
Engineering science	74	76	117	71	78	95	101	93
Industrial/manufacturing eng.	32	6	27	38	63	53	29	28
Mechanical engineering	302	220	324	349	355	383	402	417
Metallurgical/materials eng.	323	363	392	450	403	441	490	496
Nuclear engineering	36	30	29	34	40	39	28	28
Engineering, other	158	113	89	164	165	155	150	136
Total, health fields	7,014	7,745	7,992	8,850	9,649	10,555	9,749	10,501
Clinical fields	5,505	6,184	6,366	7,065	7,614	8,329	7,437	8,000
Dental sciences	45	53	77	75	102	195	227	177
Nursing	36	23	28	28	40	48	43	23
Pharmaceutical sciences	533	487	475	486	534	575	504	509
Preventive medicine/community health	192	218	204	231	248	264	291	307
Speech pathology/audiology	28	27	40	46	49	40	52	46
Veterinary sciences	111	102	119	117	133	138	159	190
Other health fields	564	651	683	802	929	966	1,036	1,249

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 47. Science, engineering, and health postdoctoral appointees in doctorate-granting institutions, by detailed field and source of support, and number of postdoctoral appointees without U.S. citizenship: 1996

Field	Total	Source of support					Number of postdoctoral appointees without U.S. citizenship
		Federal				Non-Federal	
		Total	Fellowships	Traineeships	Research grants		
Total, all surveyed fields	37,019	25,303	3,320	2,749	19,234	11,716	18,648
Total, science and engineering fields	26,518	19,297	2,128	1,311	15,858	7,221	13,608
Sciences, total	23,847	17,440	2,021	1,289	14,130	6,407	11,993
Physical sciences, total	5,802	4,584	355	62	4,167	1,218	3,321
Astronomy	312	288	26	3	259	24	104
Chemistry	3,568	2,697	248	53	2,396	871	2,186
Physics	1,836	1,534	81	6	1,447	302	988
Physical sciences, n.e.c.	86	65	0	0	65	21	43
Earth, atmos., & ocean sci., total	861	695	45	15	635	166	355
Atmospheric sciences	82	74	0	2	72	8	31
Geosciences	449	360	22	9	329	89	181
Oceanography	244	200	21	4	175	44	102
Earth, atmos., & ocean sci., n.e.c.	86	61	2	0	59	25	41
Mathematical sciences	326	222	54	4	164	104	189
Computer sciences	247	176	21	1	154	71	127
Agricultural sciences	665	373	6	4	363	292	329
Biological sciences, total	14,918	10,725	1,395	1,042	8,288	4,193	7,425
Anatomy	537	437	55	61	321	100	253
Biochemistry	2,466	1,933	217	123	1,593	533	1,298
Biology	1,633	1,230	214	60	956	403	753
Biometry/epidemiology	153	131	29	71	31	22	47
Biophysics	252	180	23	5	152	72	124
Botany	599	425	57	0	368	174	256
Cell biology	1,725	1,124	233	35	856	601	816
Ecology	107	80	2	10	68	27	34
Entomology/parasitology	183	127	3	0	124	56	76
Genetics	719	466	80	61	325	253	352
Microbio., immunology, & virology	1,975	1,443	163	159	1,121	532	1,039
Nutrition	198	110	8	14	88	88	93
Pathology	1,220	784	64	157	563	436	660
Pharmacology	1,418	1,069	100	151	818	349	752
Physiology	1,089	814	94	103	617	275	592
Zoology	135	95	17	10	68	40	40
Biosciences, n.e.c.	509	277	36	22	219	232	240
Psychology	584	441	84	125	232	143	111
Social sciences, total	444	224	61	36	127	220	136
Agricultural economics	56	34	0	0	34	22	25
Anthropology (cultural & social)	74	13	4	0	9	61	17
Economics (except agricultural)	16	4	2	0	2	12	5
Geography	22	7	0	0	7	15	11
Linguistics	36	17	2	6	9	19	10
Political science	35	9	1	1	7	26	10
Sociology	127	106	39	23	44	21	28
Sociology/anthropology	0	0	0	0	0	0	0
Social sciences, other	78	34	13	6	15	44	30
Engineering, total	2,671	1,857	107	22	1,728	814	1,615
Aerospace engineering	117	94	3	0	91	23	77
Agricultural engineering	48	20	1	0	19	28	39
Biomedical engineering	143	105	14	14	77	38	73
Chemical engineering	542	372	21	2	349	170	330
Civil engineering	230	135	4	1	130	95	146
Electrical engineering	393	291	25	1	265	102	252
Engineering science	93	81	7	1	73	12	46
Industrial eng./manufacturing eng.	28	15	1	0	14	13	10
Mechanical engineering	417	305	16	0	289	112	252
Metallurgical/materials eng.	496	324	14	3	307	172	296
Nuclear engineering	28	18	0	0	18	10	14
Engineering, other	136	97	1	0	96	39	80

See explanatory information, if any, and SOURCE at end of table.

Table 47. Science, engineering, and health postdoctoral appointees in doctorate-granting institutions, by detailed field and source of support, and number of postdoctoral appointees without U.S. citizenship: 1996

Field	Total	Source of support					Number of postdoctoral appointees without U.S. citizenship
		Federal				Non-Federal	
		Total	Fellowships	Trainee-ships	Research grants		
Total, health fields	10,501	6,006	1,192	1,438	3,376	4,495	5,040
Clinical fields	8,000	4,492	976	1,165	2,351	3,508	3,953
Dental sciences	177	96	10	48	38	81	58
Nursing	23	21	6	12	3	2	3
Pharmaceutical sciences	509	324	18	19	287	185	294
Preventive medicine/community health	307	223	39	29	155	84	111
Speech pathology/audiology	46	34	3	5	26	12	10
Veterinary sciences	190	95	16	7	72	95	62
Other health fields	1,249	721	124	153	444	528	549

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 48. Nonfaculty research scientists, engineers, and health professionals with doctorates in doctorate-granting institutions, by detailed field: 1989-96

Field	1989	1990	1991	1992	1993	1994	1995	1996
Total, all surveyed fields	4,883	5,224	5,449	5,456	5,981	6,197	6,511	6,586
Total, science and engineering fields	4,026	4,327	4,509	4,373	4,788	4,977	5,169	5,140
Sciences, total	3,445	3,721	3,850	3,636	3,985	4,152	4,380	4,422
Physical sciences, total	986	1,001	1,000	1,065	1,222	1,244	1,374	1,292
Astronomy	68	87	66	70	100	151	158	154
Chemistry	465	449	474	472	538	522	538	552
Physics	452	461	459	522	583	569	658	568
Physical sciences, n.e.c.	1	4	1	1	1	2	20	18
Earth, atmos., & ocean sci., total	227	314	298	302	340	363	418	430
Atmospheric sciences	10	19	26	21	40	27	21	46
Geosciences	118	135	129	153	138	198	218	190
Oceanography	82	137	137	114	132	118	152	167
Earth, atmos., & ocean sci., n.e.c.	17	23	6	14	30	20	27	27
Mathematical sciences	64	90	84	70	52	72	93	88
Computer sciences	68	61	50	42	67	48	66	107
Agricultural sciences	149	182	197	189	170	251	228	209
Biological sciences, total	1,693	1,737	1,849	1,684	1,833	1,843	1,951	1,897
Anatomy	86	65	50	39	52	39	48	59
Biochemistry	362	329	351	284	294	270	337	322
Biology	233	265	242	258	313	314	317	308
Biometry/epidemiology	19	21	33	26	36	37	32	26
Biophysics	19	31	36	38	49	54	58	44
Botany	73	76	122	79	97	86	88	66
Cell biology	162	122	147	158	201	176	210	194
Ecology	31	13	26	19	21	14	21	18
Entomology/parasitology	36	86	78	64	74	59	60	51
Genetics	53	58	70	53	67	63	65	79
Microbio., immunology, & virology	120	166	150	159	155	206	187	195
Nutrition	63	77	86	60	56	81	63	56
Pathology	103	113	102	123	114	145	132	136
Pharmacology	123	134	150	116	142	128	169	164
Physiology	172	122	143	136	99	103	115	119
Zoology	25	40	40	30	20	29	16	13
Biosciences, n.e.c.	13	19	23	42	43	39	33	47
Psychology	179	198	192	152	171	203	146	232
Social sciences, total	79	138	180	132	130	128	104	167
Agricultural economics	6	17	13	12	14	15	12	22
Anthropology (cultural & social)	30	46	57	35	43	48	34	34
Economics (except agricultural)	0	8	6	6	3	3	9	16
Geography	4	4	4	6	6	9	4	11
Linguistics	8	25	49	9	5	8	2	4
Political science	15	5	3	7	3	2	6	15
Sociology	5	23	26	24	16	9	11	15
Sociology/anthropology	0	0	0	0	0	0	0	3
Social sciences, other	11	10	22	33	40	34	26	47
Engineering, total	581	606	659	737	803	825	789	718
Aerospace engineering	14	24	26	39	69	66	80	74
Agricultural engineering	19	13	12	10	5	23	27	15
Biomedical engineering	18	12	16	26	26	36	26	21
Chemical engineering	75	77	61	148	126	87	70	82
Civil engineering	37	51	54	52	67	54	66	69
Electrical engineering	114	103	121	123	135	159	175	144
Engineering science	19	17	16	16	34	30	37	38
Industrial/manufacturing eng.	11	21	20	17	7	6	3	2
Mechanical engineering	89	125	113	97	116	135	108	108
Metallurgical/materials eng.	120	103	147	131	142	139	120	95
Nuclear engineering	38	36	34	37	27	36	32	29
Engineering, other	27	24	39	41	49	54	45	41
Total, health fields	857	897	940	1,083	1,193	1,220	1,342	1,446
Clinical fields	612	625	646	717	718	786	899	949
Dental sciences	9	8	16	20	27	11	12	14
Nursing	3	10	2	9	5	8	7	15
Pharmaceutical sciences	46	32	83	81	115	101	118	99
Preventive medicine/community health	42	69	55	65	95	105	90	118
Speech pathology/audiology	20	20	7	7	13	12	20	14
Veterinary sciences	28	34	30	47	45	58	53	67
Other health fields	97	99	101	137	175	139	143	170

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 49. Graduate students in science, engineering, and health fields in historically black colleges and universities, by detailed field, citizenship, and racial/ethnic background of U.S. citizens: 1996

Field	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Total, all surveyed fields	5,128	3,384	6	226	51	754	182	525
Total, science and engineering fields	4,678	3,174	6	217	46	555	170	510
Sciences, total	4,121	2,883	6	171	30	496	132	403
Physical sciences, total	464	279	1	30	8	32	18	96
Astronomy	0	0	0	0	0	0	0	0
Chemistry	260	156	1	16	8	13	8	58
Physics	199	119	0	13	0	19	10	38
Physical sciences, n.e.c.	5	4	0	1	0	0	0	0
Earth, atmos., & ocean sci., total	75	34	0	7	2	27	5	0
Atmospheric sciences	0	0	0	0	0	0	0	0
Geosciences	0	0	0	0	0	0	0	0
Oceanography	33	6	0	3	1	21	2	0
Earth, atmos., & ocean sci., n.e.c.	42	28	0	4	1	6	3	0
Mathematical sciences	211	157	0	7	0	23	0	24
Computer sciences	419	217	1	85	1	36	8	71
Agricultural sciences	175	111	1	6	3	17	2	35
Biological sciences, total	735	543	0	22	8	72	23	67
Anatomy	7	3	0	1	0	0	0	3
Biochemistry	18	11	0	0	1	2	1	3
Biology	373	297	0	12	5	35	16	8
Biometry/epidemiology	0	0	0	0	0	0	0	0
Biophysics	0	0	0	0	0	0	0	0
Botany	40	32	0	0	0	0	0	8
Cell biology	0	0	0	0	0	0	0	0
Ecology	0	0	0	0	0	0	0	0
Entomology/parasitology	0	0	0	0	0	0	0	0
Genetics	33	8	0	1	0	18	0	6
Microbio., immunology, & virology	36	29	0	2	1	1	3	0
Nutrition	81	41	0	3	0	10	0	27
Pathology	0	0	0	0	0	0	0	0
Pharmacology	30	23	0	2	0	0	0	5
Physiology	44	34	0	0	0	2	2	6
Zoology	0	0	0	0	0	0	0	0
Biosciences, n.e.c.	73	65	0	1	1	4	1	1
Psychology	622	430	1	6	5	158	20	2
Social sciences, total	1,420	1,112	2	8	3	131	56	108
Agricultural economics	25	19	0	0	0	1	0	5
Anthropology (cultural & social)	0	0	0	0	0	0	0	0
Economics (except agricultural)	60	27	0	0	0	3	6	24
Geography	0	0	0	0	0	0	0	0
Linguistics	0	0	0	0	0	0	0	0
Political science	772	641	2	6	0	69	20	34
Sociology	261	199	0	1	0	21	6	34
Sociology/anthropology	84	58	0	0	0	2	22	2
Social sciences, other	218	168	0	1	3	35	2	9
Engineering, total	557	291	0	46	16	59	38	107
Aerospace engineering	0	0	0	0	0	0	0	0
Agricultural engineering	0	0	0	0	0	0	0	0
Biomedical engineering	0	0	0	0	0	0	0	0
Chemical engineering	32	10	0	0	3	5	0	14
Civil engineering	130	60	0	14	9	25	21	1
Electrical engineering	105	69	0	8	0	5	0	23
Engineering science	0	0	0	0	0	0	0	0
Industrial/manufacturing eng.	56	42	0	6	0	4	2	2
Mechanical engineering	121	71	0	4	0	12	0	34
Metallurgical/materials eng.	0	0	0	0	0	0	0	0
Nuclear engineering	0	0	0	0	0	0	0	0
Engineering, other	113	39	0	14	4	8	15	33
Total, health fields	450	210	0	9	5	199	12	15
Clinical fields	81	9	0	3	1	68	0	0
Dental sciences	0	0	0	0	0	0	0	0
Nursing	38	36	0	0	0	1	0	1
Pharmaceutical sciences	36	22	0	0	0	8	5	1
Preventive medicine/community health	0	0	0	0	0	0	0	0
Speech pathology/audiology	205	123	0	1	3	68	0	10
Veterinary sciences	14	11	0	0	0	0	0	3
Other health fields	76	9	0	5	1	54	7	0

KEY: n.e.c. = Not elsewhere classified

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 50. Graduate students in science and engineering fields in historically black colleges and universities, by geographic distribution, citizenship, and racial/ethnic background of U.S. citizens: 1996

Geographic distribution	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Total, all institutions	4,678	3,174	6	217	46	555	170	510
New England	0	0	0	0	0	0	0	0
Connecticut	0	0	0	0	0	0	0	0
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	0	0	0	0	0
New Hampshire	0	0	0	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	0	0	0	0	0
Middle Atlantic	0	0	0	0	0	0	0	0
New Jersey	0	0	0	0	0	0	0	0
New York	0	0	0	0	0	0	0	0
Pennsylvania	0	0	0	0	0	0	0	0
East North Central	0	0	0	0	0	0	0	0
Illinois	0	0	0	0	0	0	0	0
Indiana	0	0	0	0	0	0	0	0
Michigan	0	0	0	0	0	0	0	0
Ohio	0	0	0	0	0	0	0	0
Wisconsin	0	0	0	0	0	0	0	0
West North Central	20	11	0	0	0	9	0	0
Iowa	0	0	0	0	0	0	0	0
Kansas	0	0	0	0	0	0	0	0
Minnesota	0	0	0	0	0	0	0	0
Missouri	20	11	0	0	0	9	0	0
Nebraska	0	0	0	0	0	0	0	0
North Dakota	0	0	0	0	0	0	0	0
South Dakota	0	0	0	0	0	0	0	0
South Atlantic	2,573	1,761	5	131	34	280	119	243
Delaware	50	11	0	1	0	32	3	3
District of Columbia	757	529	0	25	0	42	54	107
Florida	251	142	1	9	13	43	39	4
Georgia	396	312	2	8	12	2	9	51
Maryland	222	121	0	28	5	53	7	8
North Carolina	715	508	2	45	4	93	3	60
South Carolina	0	0	0	0	0	0	0	0
Virginia	182	138	0	15	0	15	4	10
West Virginia	0	0	0	0	0	0	0	0
East South Central	1,183	750	1	42	2	183	23	182
Alabama	307	172	1	6	0	23	6	99
Kentucky	0	0	0	0	0	0	0	0
Mississippi	322	238	0	24	1	20	13	26
Tennessee	554	340	0	12	1	140	4	57
West South Central	902	652	0	44	10	83	28	85
Arkansas	0	0	0	0	0	0	0	0
Louisiana	457	350	0	26	0	65	3	13
Oklahoma	0	0	0	0	0	0	0	0
Texas	445	302	0	18	10	18	25	72

See explanatory information, if any, and SOURCE at end of table.

Table 50. Graduate students in science and engineering fields in historically black colleges and universities, by geographic distribution, citizenship, and racial/ethnic background of U.S. citizens: 1996

Geographic distribution	Total	Racial/ethnic background of U.S. citizens						Non-U.S. citizens
		Black non-Hispanic	American Indian/ Alaskan Native	Asian/ Pacific Islander	Hispanic	White non-Hispanic	Other or unknown	
Mountain	0	0	0	0	0	0	0	0
Arizona	0	0	0	0	0	0	0	0
Colorado	0	0	0	0	0	0	0	0
Idaho	0	0	0	0	0	0	0	0
Montana	0	0	0	0	0	0	0	0
Nevada	0	0	0	0	0	0	0	0
New Mexico	0	0	0	0	0	0	0	0
Utah	0	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0	0
Pacific	0	0	0	0	0	0	0	0
Alaska	0	0	0	0	0	0	0	0
California	0	0	0	0	0	0	0	0
Hawaii	0	0	0	0	0	0	0	0
Oregon	0	0	0	0	0	0	0	0
Washington	0	0	0	0	0	0	0	0
Outlying areas	0	0	0	0	0	0	0	0

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 51. Black graduate students in science, engineering, and health fields in all institutions and historically black colleges and universities, by field: 1990-96

Field	1990	1991	1992	1993	1994	1995	1996
	Total, all black students						
Total, all surveyed fields	15,216	16,407	18,487	20,439	21,177	22,154	22,996
Total, science and engineering fields	12,774	13,691	15,445	17,118	17,611	18,283	19,084
Sciences, total	10,988	11,666	13,071	14,559	14,827	15,427	16,190
Physical sciences	654	699	807	843	856	897	986
Earth, atmos., and ocean sciences	123	141	202	227	203	219	223
Mathematical sciences	511	524	579	710	673	689	711
Computer sciences	985	1,093	1,108	1,168	1,182	1,155	1,278
Agricultural sciences	158	145	209	235	239	294	268
Biological sciences	1,249	1,317	1,493	1,737	1,709	1,879	2,010
Psychology	2,226	2,455	2,758	3,284	3,529	3,359	3,460
Social sciences	5,082	5,292	5,915	6,355	6,436	6,935	7,254
Engineering	1,786	2,025	2,374	2,559	2,784	2,856	2,894
Health fields	2,442	2,716	3,042	3,321	3,566	3,871	3,912
	Black students in HBCUs						
Total, all surveyed fields	2,004	2,090	2,232	2,627	2,982	3,189	3,384
Total, science and engineering fields	1,913	1,959	2,075	2,433	2,768	2,906	3,174
Sciences, total	1,771	1,816	1,898	2,221	2,515	2,612	2,883
Physical sciences	174	190	179	211	231	253	279
Earth, atmos., and ocean sciences	14	24	30	42	30	38	34
Mathematical sciences	108	107	111	169	155	139	157
Computer sciences	159	189	200	190	227	210	217
Agricultural sciences	34	37	70	84	102	130	111
Biological sciences	278	278	306	403	453	492	543
Psychology	313	317	352	428	489	413	430
Social sciences	691	674	650	694	828	937	1,112
Engineering	142	143	177	212	253	294	291
Health fields	91	131	157	194	214	283	210
	Percent in HBCUs						
Total, all surveyed fields	13.2	12.7	12.1	12.9	14.1	14.4	14.7
Total, science and engineering fields	15.0	14.3	13.4	14.3	15.7	15.9	16.6
Sciences, total	16.1	15.6	14.5	15.4	17.0	16.9	17.8
Physical sciences	26.6	27.2	22.2	24.9	27.0	28.2	28.3
Earth, atmos., and ocean sciences	11.4	17.0	14.9	18.5	14.8	17.4	15.2
Mathematical sciences	21.1	20.4	19.2	25.9	23.0	20.2	22.1
Computer sciences	16.1	17.3	18.1	16.3	19.2	18.2	17.0
Agricultural sciences	21.5	25.5	33.5	41.0	42.7	44.2	41.4
Biological sciences	22.3	21.1	20.5	23.1	26.5	26.2	27.0
Psychology	14.1	12.9	12.8	12.8	13.9	12.3	12.4
Social sciences	13.6	12.7	11.0	10.9	12.9	13.5	15.3
Engineering	8.0	7.1	7.5	8.2	9.1	10.3	10.1
Health fields	3.7	4.8	5.2	5.8	6.0	7.3	5.4

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 52. Black graduate students in science, engineering, and health fields in all institutions and historically black colleges and universities, by field and sex: 1994-96

Field	Men			Women		
	1994	1995	1996	1994	1995	1996
	Total, all black students					
Total, all surveyed fields	8,669	8,934	8,988	12,508	13,220	14,008
Total, science and engineering fields	8,049	8,211	8,264	9,562	10,072	10,820
Sciences, total	6,082	6,254	6,313	8,745	9,173	9,877
Physical sciences	497	529	550	359	368	436
Earth, atmospheric, and ocean sciences	118	117	116	85	102	107
Mathematical sciences	343	385	368	330	304	343
Computer sciences	696	652	718	486	503	560
Agricultural sciences	118	150	131	121	144	137
Biological sciences	671	691	725	1,038	1,188	1,285
Psychology	851	817	816	2,678	2,542	2,644
Social sciences	2,788	2,913	2,889	3,648	4,022	4,365
Engineering	1,967	1,957	1,951	817	899	943
Health fields	620	723	724	2,946	3,148	3,188
	Black students in HBCUs					
Total, all surveyed fields	1,265	1,331	1,383	1,717	1,858	2,001
Total, science and engineering fields	1,226	1,273	1,343	1,542	1,633	1,831
Sciences, total	1,048	1,078	1,152	1,467	1,534	1,731
Physical sciences	127	145	161	104	108	118
Earth, atmospheric, and ocean sciences	12	16	14	18	22	20
Mathematical sciences	69	79	80	86	60	77
Computer sciences	125	92	105	102	113	112
Agricultural sciences	42	57	54	60	73	57
Biological sciences	187	194	202	266	298	341
Psychology	132	114	108	357	299	322
Social sciences	354	381	428	474	556	684
Engineering	178	195	191	75	99	100
Health fields	39	58	40	175	225	170
	Percent in HBCUs					
Total, all surveyed fields	14.6	14.9	15.4	13.7	14.1	14.3
Total, science and engineering fields	15.2	15.5	16.3	16.1	16.2	16.9
Sciences, total	17.2	17.2	18.2	16.8	16.7	17.5
Physical sciences	25.6	27.4	29.3	29.0	29.3	27.1
Earth, atmospheric, and ocean sciences	10.2	13.7	12.1	21.2	21.6	18.7
Mathematical sciences	20.1	20.5	21.7	26.1	19.7	22.4
Computer sciences	18.0	14.1	14.6	21.0	23.5	20.0
Agricultural sciences	35.6	38.0	41.2	49.6	50.7	41.6
Biological sciences	27.9	28.1	27.9	25.6	25.1	26.5
Psychology	15.5	14.0	13.2	13.3	11.8	12.2
Social sciences	12.7	13.1	14.8	13.0	13.8	15.7
Engineering	9.0	10.0	9.8	9.2	11.0	10.6
Health fields	6.3	8.0	5.5	5.9	7.1	5.3

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 53. Full-time black graduate students in science, engineering, and health fields in all institutions and historically black colleges and universities, by field: 1990-96

Field	1990	1991	1992	1993	1994	1995	1996
	Total, all black students						
Total, all surveyed fields	8,112	8,863	10,219	11,387	11,965	12,501	12,982
Total, science and engineering fields	7,029	7,692	8,904	9,903	10,343	10,668	10,976
Sciences, total	6,079	6,552	7,545	8,413	8,640	8,978	9,313
Physical sciences	488	529	630	690	709	729	769
Earth, atmos., and ocean sciences	85	97	128	142	129	136	130
Mathematical sciences	264	276	331	411	412	423	422
Computer sciences	367	446	411	460	465	485	475
Agricultural sciences	133	113	163	162	162	227	194
Biological sciences	931	997	1,119	1,348	1,369	1,450	1,513
Psychology	1,268	1,424	1,656	1,854	2,046	2,028	2,073
Social sciences	2,543	2,670	3,107	3,346	3,348	3,500	3,737
Engineering	950	1,140	1,359	1,490	1,703	1,690	1,663
Health fields	1,083	1,171	1,315	1,484	1,622	1,833	2,006
	Black students in HBCUs						
Total, all surveyed fields	1,162	1,234	1,289	1,604	1,951	2,004	2,086
Total, science and engineering fields	1,098	1,158	1,201	1,484	1,807	1,841	1,954
Sciences, total	997	1,046	1,075	1,300	1,588	1,591	1,735
Physical sciences	114	136	130	178	188	198	217
Earth, atmos., and ocean sciences	6	12	11	24	15	8	9
Mathematical sciences	53	58	62	106	98	89	99
Computer sciences	71	93	90	93	113	92	90
Agricultural sciences	26	24	57	32	46	92	67
Biological sciences	214	212	228	333	375	380	419
Psychology	127	138	145	193	284	262	259
Social sciences	386	373	352	341	469	470	575
Engineering	101	112	126	184	219	250	219
Health fields	64	76	88	120	144	163	132
	Percent in HBCUs						
Total, all surveyed fields	14.3	13.9	12.6	14.2	16.3	16.0	16.1
Total, science and engineering fields	15.6	15.1	13.5	15.2	17.5	17.3	17.8
Sciences, total	16.4	16.0	14.2	15.7	18.4	17.7	18.6
Physical sciences	23.4	25.7	20.6	25.6	26.5	27.2	28.2
Earth, atmos., and ocean sciences	7.1	12.4	8.6	16.9	11.6	5.9	6.9
Mathematical sciences	20.1	21.0	18.7	29.2	23.8	21.0	23.5
Computer sciences	19.3	20.9	21.9	20.2	24.3	19.0	18.9
Agricultural sciences	19.5	21.2	35.0	26.1	28.4	40.5	34.5
Biological sciences	23.0	21.3	20.4	24.6	27.4	26.2	27.7
Psychology	10.0	9.7	8.8	10.2	13.9	12.9	12.5
Social sciences	15.2	14.0	11.3	10.1	14.0	13.4	15.4
Engineering	10.6	9.8	9.3	12.2	12.9	14.8	13.2
Health fields	5.9	6.5	6.7	8.1	8.9	8.9	6.6

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering

Table 54. Full-time black graduate students in science, engineering, and health fields in all institutions and historically black colleges and universities, by field and sex: 1994-96

Field	Men			Women		
	1994	1995	1996	1994	1995	1996
	Total, all black students					
Total, all surveyed fields	5,114	5,212	5,243	6,851	7,289	7,739
Total, science and engineering fields	4,772	4,807	4,783	5,571	5,861	6,193
Sciences, total	3,607	3,691	3,692	5,033	5,287	5,621
Physical sciences	409	434	441	300	295	328
Earth, atmospheric, and ocean sciences	79	78	68	50	58	62
Mathematical sciences	208	242	221	204	181	201
Computer sciences	283	285	281	182	200	194
Agricultural sciences	82	105	83	80	122	111
Biological sciences	546	543	562	823	907	951
Psychology	507	489	491	1,539	1,539	1,582
Social sciences	1,493	1,515	1,545	1,855	1,985	2,192
Engineering	1,165	1,116	1,091	538	574	572
Health fields	342	405	460	1,280	1,428	1,546
	Black students in HBCUs					
Total, all surveyed fields	867	848	865	1,084	1,156	1,221
Total, science and engineering fields	838	825	846	969	1,016	1,108
Sciences, total	683	662	707	905	929	1,028
Physical sciences	105	117	129	83	81	88
Earth, atmospheric, and ocean sciences	8	6	5	7	2	4
Mathematical sciences	39	51	51	59	38	48
Computer sciences	64	40	52	49	52	38
Agricultural sciences	23	35	30	23	57	37
Biological sciences	157	148	158	218	232	261
Psychology	72	63	58	212	199	201
Social sciences	215	202	224	254	268	351
Engineering	155	163	139	64	87	80
Health fields	29	23	19	115	140	113
	Percent in HBCUs					
Total, all surveyed fields	17.0	16.3	16.5	15.8	15.9	15.8
Total, science and engineering fields	17.6	17.2	17.7	17.4	17.3	17.9
Sciences, total	18.9	17.9	19.1	18.0	17.6	18.3
Physical sciences	25.7	27.0	29.3	27.7	27.5	26.8
Earth, atmospheric, and ocean sciences	10.1	7.7	7.4	14.0	3.4	6.5
Mathematical sciences	18.8	21.1	23.1	28.9	21.0	23.9
Computer sciences	22.6	14.0	18.5	26.9	26.0	19.6
Agricultural sciences	28.0	33.3	36.1	28.7	46.7	33.3
Biological sciences	28.8	27.3	28.1	26.5	25.6	27.4
Psychology	14.2	12.9	11.8	13.8	12.9	12.7
Social sciences	14.4	13.3	14.5	13.7	13.5	16.0
Engineering	13.3	14.6	12.7	11.9	15.2	14.0
Health fields	8.5	5.7	4.1	9.0	9.8	7.3

SOURCE: National Science Foundation/SRS, Survey of Graduate Students and Postdoctorates in Science and Engineering.

SURVEY MATERIALS

Item *Page*

Instructions for the NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering, Fall 1996 138

Survey of Graduate Students and Postdoctorates in Science and Engineering, Fall 1996: Department or Program Data Sheet (NSF Form 812) 140

Crosswalk between NSF discipline codes and the NCES Classification of Instructional Programs 142

INSTRUCTIONS

FOR THE NSF-NIH SURVEY OF GRADUATE STUDENTS AND POSTDOCTORATES IN SCIENCE AND ENGINEERING, FALL 1996

PURPOSE OF THE SURVEY

The survey provides a comprehensive picture of the training of future scientists and engineers in the Nation's graduate schools. Data are used by Congress and the executive branch during budget preparation, and by State government agencies and other analysts to assess the future supply of science and engineering (S&E) personnel.

This information is solicited under the authority of the National Science Foundation Act of 1950, as amended. All information provided will be used for statistical purposes only. Response is entirely voluntary and failure to provide some or all of the information will in no way adversely affect your institution.

The average time required for questionnaire completion is 2 hours. Response burden comments should be directed to Herman Fleming of NSF at (703) 306-1243.

Students Included in This Survey

Count as graduate students persons enrolled **for credit** in any S&E master's or Ph.D. degree program in fall 1996. Report M.D., D.O., D.V.M., or D.D.S. candidates, interns, and residents in items 5 through 7 **only** if they are concurrently working for an S&E master's or Ph.D. degree or are enrolled in a joint medical/Ph.D. program. Individuals who already hold graduate or medical degrees and are working on another master's or Ph.D. degree are considered graduate students (items 5 through 7), not postdoctorates (item 8).

Include S&E students performing thesis or dissertation research away from the campus (for example, at Government- and contractor-owned facilities) in the United States as long as they are enrolled for credit in an advanced-degree program.

All data should be reported in terms of headcounts, not full-time equivalents (FTEs).

Students Excluded From This Survey

Exclude students enrolled in a foreign country (at a branch or extension center), and non-matriculated students.

Students Enrolled in Multiple Departments/Institutions

A student should be reported in only **one** department. Students enrolled in interdisciplinary/interinstitutional programs should be counted only once, by their "home" department and institution.

INCOMPLETE DATA

Please write "unavailable" or "unknown" in data cells as applicable. On this form, "N/A" means "not applicable." Data cells left blank are presumed to be zeroes.

ITEM 5: FULL-TIME STUDENTS

Report the total number of full-time degree-seeking students in line (6), column (L). Then, in lines (1) through (6), count each full-time student **only once** by **largest** source of support so that all columns and rows in item 5 sum to the full-time total in line (6), column (L). In item 5, count only graduate students pursuing an S&E degree according to a full-time schedule; this may include any combination of study, teaching, and research, depending on your institution's policy and definition of full-time status. For example, many institutions base full-time status on the number of credit hours taken; others calculate full-time according to the amount of fees paid by the student.

Mechanisms of Support—Lines (1) Through (5)

A **fellowship,** line (1), is any competitive award (often from a national competition) made to a student that requires no work of the recipient. A **traineeship,** line (2), is an educational award given to a student selected by the institution. An **assistantship** should be classified as **research,** line (3), or **teaching,** line (4), depending on assigned duties; e.g., a student devoting most of his or her time to teaching should be reported on line (4). All other full-time students, including members of the Armed Forces whose tuition is paid by the Department of Defense, and self-supported students, should be reported on line (5).

Federal Sources of Support—Columns (A) Through (G)

Department of Defense (DoD)—Column (A): Sources include the Departments of the Army, Navy, or Air Force, as well as programs within the Office of the Secretary of Defense. Students receiving their main support from the Veterans Administration under the G.I. Bill should be reported under column (F), "Other Federal sources."

Department of Health and Human Services (HHS)—Columns (B) and (C): Report students with support from the institutes or divisions of the National Institutes of Health (NIH) under column (B); report support from all other components of HHS in column (C). Refer to the organizational roster under "Definitions."

National Science Foundation (NSF)—Column (D): Report students receiving NSF graduate fellowships and minority fellowships, as well as those supported under NSF research grants.

U.S. Department of Agriculture (USDA)—Column (E): Include research assistants working on projects financed out of Hatch, McIntyre-Stennis, or Smith-Lever formula funds, competitive research grants, and institution fellowship/training grants.

National Aeronautics and Space Administration (NASA)—Column (F): Report students with support from this agency.

Other Federal sources—Column (G): Report students receiving support from Federal agencies other than those listed in columns (A) through (F), such as the Fulbright program, the G.I. Bill, and Department of Education and Department of Energy programs. Students primarily supported by Federal loans should be reported in column (K), "Self-supported students."

Non-Federal Sources of Support—Cols. (H) Through (J)

Institutional support—Column (H): Report students supported from YOUR institution, including those receiving tuition waivers. State and local government support should also be reported in this column. Students primarily supported with funds from the Federal Government, such as training grants, however, should be reported under the appropriate Federal agency.

Foreign sources—Column (I): Report students supported from any non-U.S. source, such as foreign governments, industrial firms, or specialized agencies of the United Nations.

Other U.S. sources—Column (J): Report students supported from nonprofit institutions, private industry, and all other non-Federal U.S. sources not included in columns (H) or (I).

Self-supported students—Column (K): Report both foreign and U.S. citizen students whose largest source of support comes from ANY loans (including Federal loans) or from personal or family financial contributions. **These students must be included in the full-time total, line (6), column (L).**

Women—Line (7)

Report all full-time female students by the source of their primary support. The total number of full-time women should be reported in line (7), column (L).

In each column, data on line (7) should not exceed the total on line (6).

First-Time Full-Time Students—Lines (8) and (9)

A first-time student has enrolled in the program in which he or she is pursuing a degree as of the beginning of the fall term in 1996. All other students should be considered to be beyond their first time of enrollment.

ITEM 6: PART-TIME STUDENTS

Report all part-time students in item 6, regardless of their source of support. Part-time students are pursuing an S&E graduate degree but NOT on a full-time schedule. Consider students part-time according to your own institution's definition of part-time status.

ITEM 7: CITIZENSHIP AND RACIAL/ETHNIC BACKGROUND OF U.S. CITIZENS AND PERMANENT RESIDENTS

Report all U.S. citizens and permanent residents in columns (A) through (G), and count each student only once according to his or her racial/ethnic category as defined by the Bureau of the Census, listed under "Definitions."

Count foreign students, i.e., those holding temporary visas, only **once** in column (H), regardless of race/ethnicity. Native residents of a U.S. possession and applicants for U.S. citizenship holding green cards, however, should be reported as U.S. citizens.

Total full-time and part-time enrollments reported in item 7 should match those reported in items 5 and 6, respectively.

ITEM 8: POSTDOCTORATES AND NONFACULTY RESEARCH STAFF WITH DOCTORATES

Postdoctorates—Columns (A) through (F): Include individuals with science and engineering Ph.D.'s, M.D.'s, D.D.S.'s, or D.V.M.'s (including foreign degrees equivalent to U.S. doctorates) who devote their **primary effort to their own research training through research activities or study** in the department under temporary appointments carrying no academic rank. These individuals may contribute to the academic program through seminars, lectures, or working with graduate students. Such postdoctorates may have different titles at different institutions, e.g., "Postdoctoral Scholar," "Research Associate," "Postdoctoral Fellow," or "Postgraduate Researcher." Exclude, however, clinical fellows and those with appointments in residency training programs in medical and health professions, **unless research training under the supervision of a senior mentor is the primary purpose** of the appointment.

Report postdoctorates by source of support in columns (A) through (D), with the total number of postdoctorates reported in column (E). Of this total, report the number who are foreign in column (F).

Other non-faculty research staff with doctorates—Column (G): Include all doctoral scientists and engineers who are involved principally in research activities but are not considered either postdoctoral appointees or members of the regular faculty.

On line (2), report the number of women in each category. On line (3), report those postdoctorates and nonfaculty research staff who hold first professional medical degrees (M.D., D.O., D.D.S., D.V.M.). Please note that in each column, data on lines (2) and (3) should not exceed the total on line (1).

DEFINITIONS

(1) NATIONAL INSTITUTES OF HEALTH ORGANIZATIONAL ROSTER—Item 5, column (B)

Fogarty International Center
National Cancer Institute
National Center for Human Genome Research
National Center for Nursing Research
National Center for Research Resources
National Eye Institute
National Heart, Lung, and Blood Institute
National Institute of Arthritis and Musculoskeletal and Skin Diseases
National Institute of Child Health and Human Development
National Institute of Dental Research
National Institute of Diabetes and Digestive and Kidney Diseases
National Institute of Environmental Health Sciences
National Institute of General Medical Sciences
National Institute of Mental Health
National Institute of Neurological Disorders and Stroke
National Institute on Aging
National Institute on Alcohol Abuse and Alcoholism
National Institute of Allergy and Infectious Diseases
National Institute on Deafness and Other Communication Disorders
National Institute on Drug Abuse
National Library of Medicine

(2) OTHER HHS ADMINISTRATIVE UNITS —Item 5, column (C)

Substance Abuse and Mental Health Services Administration (Please note that the former Alcohol, Drug Abuse and Mental Health Administration institutes are now part of the National Institutes of Health.)
Centers for Disease Control
National Institute for Occupational Safety and Health
Food and Drug Administration
Health Resources and Services Administration

(3) RACIAL/ETHNIC CATEGORIES FOR U.S. CITIZENS AND PERMANENT RESIDENTS DEFINED BY THE BUREAU OF THE CENSUS —Item 7

Black, non-Hispanic: Persons having origins in any of the black racial groups (except those of Hispanic origin).

American Indian or Alaskan native: Persons having origins in any of the original peoples of North America.

Asian or Pacific Islander: Persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. These areas include China, Japan, Korea, the Philippine Islands, and Samoa.

Hispanic: Persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.

White, non-Hispanic: Persons having origins in any of the original peoples of Europe, North Africa, or the Middle East, except those of Hispanic origin.

FOR FURTHER INFORMATION . . .

If you have any questions about this survey, please contact Ms. Karen Gliwa or Ms. Veerle Van Meel of Quantum Research Corporation by telephone at (301) 657-3070, or by e-mail at gss@qrc.com.

UPON COMPLETING THIS FORM, PLEASE RETURN IT TO YOUR SURVEY COORDINATOR FOR TRANSMITTAL BY JANUARY 31, 1997.

NSF Form 812 Oct 96

NATIONAL SCIENCE FOUNDATION and NATIONAL INSTITUTES OF HEALTH

Survey of Graduate Students and Postdoctorates in Science and Engineering, Fall 1996

Form approved
OMB No. 3145-0062
Appr Exp 11/30/99

DEPARTMENT OR PROGRAM DATA SHEET

Due date: January 31, 1997

ITEMS 1-4. IDENTIFYING INFORMATION

1. Institution name: _____

2. Name of S&E department or program: _____

If changed since last year, please indicate previous name and whether this represents a merger, split, or expanded program: _____

3. Person in department or program preparing this form:

Name: _____

Title: _____

Phone: (_____) _____

E-mail address: _____

4. Highest **graduate** degree available in this department or program (CHECK ONE): (1) Ph.D.[1] ☐ (2) Master's ☐ (3) No Ph.D.[1] or master's degree offered ☐

Institution and department code (LEAVE BLANK)

Report all data on a headcount basis (use whole numbers, *not* fractions, decimals, FTEs, etc.). If your department does not enroll graduate students, please go to item 8.

ITEM 5. NUMBER OF **FULL-TIME** GRADUATE STUDENTS enrolled for advanced degrees (master's and doctoral) in fall 1996. Report each student **only once** according to the source and mechanism of the **largest amount of support** received in fall 1996.

Students receiving equal support from multiple sources or through multiple mechanisms should be reported only once. When determining the largest source of support, consider **all** graduate school academic expenses including tuition, tuition remission, and stipends.

MECHANISMS OF SUPPORT	Line	STUDENTS RECEIVING FINANCIAL ASSISTANCE										SELF-SUPPORTED STUDENTS (including loans and family sources) (K)	TOTAL FULL-TIME GRADUATE ENROLLMENT (Sum of (A) through (K)) (L)
		FEDERAL SOURCES (excluding loans)							NON-FEDERAL SOURCES				
		Department of Defense (A)	HHS: National Institutes of Health (B)	HHS: Other HHS (C)	National Science Foundation (D)	Department of Agriculture (E)	NASA (F)	Other Federal sources (G)	Institutional support (including State & local government) (H)	Foreign sources (I)	Other U.S. sources (J)		
Graduate Fellowships	(1)												
Graduate Traineeships	(2)												
Graduate Research Assistantships	(3)												
Graduate Teaching Assistantships	(4)												
Other Types of Support	(5)												
FULL-TIME TOTAL[2]	(6)												
Of the students in line (6), how many in each data cell are WOMEN?[3]	(7)												

First-Time Full-Time Students	(8)	Of the full-time students on line (6), column (L), how many are **FIRST-TIME**? **(Should not exceed total in line (6), column (L))**
First-Time Full-Time Women Students	(9)	Of the first-time students on line (8), how many are **WOMEN**?

[1] Or Ph.D. equivalent such as Sc.D. and D.Eng., but not Ed.D., M.D., or other professional degree
[2] The total from line (6) should be inserted in item 7, line (3), column (l).
[3] The total from line (7) should be inserted in item 7, line (2), column (l).

ITEM 6. NUMBER OF **PART-TIME** GRADUATE STUDENTS enrolled for advanced degrees (master's and Ph.D.) in fall 1996.

PART-TIME TOTAL (The total from line (1) should be inserted below in item 7, line (6), column (I).)	(1)	
Of the part-time students on line (1), how many are **WOMEN**? **(The total from line (2) should be inserted below in item 7, line (5), column (I).)**	(2)	

ITEM 7. RACE/ETHNICITY of FULL-TIME (Item 5) and PART-TIME (Item 6) graduate students in fall 1996, by sex.	Of the student totals in items 5 and 6, how many belong to the following RACIAL/ETHNIC categories? **In each line, count each student only once.**		**U.S. CITIZENS AND PERMANENT RESIDENTS**							**FOREIGN:** temporary visa holders (H)	**TOTAL** (Sum of (A) through (H)) (I)
			Black non-Hispanic (A)	Amer. Indian/ Alaskan Native (B)	Asian/ Pacific Islander (C)	Hispanic (D)	White non-Hispanic (E)	Other (F)	Unknown or declined to state (G)		
	MEN ENROLLED FULL TIME	(1)									
	WOMEN ENROLLED FULL TIME (column (I) should equal item 5, line (7), column (L))	(2)									
	FULL TIME, TOTAL (column (I) should equal item 5, line (6), column (L))	(3)									
	MEN ENROLLED PART TIME	(4)									
	WOMEN ENROLLED PART TIME (column (I) should equal item 6, line (2))	(5)									
	PART TIME, TOTAL (column (I) should equal item 6, line (1))	(6)									

ITEM 8. NUMBER OF **POSTDOCTORATES AND NON-FACULTY RESEARCH STAFF WITH DOCTORATES** in fall 1996.		**POSTDOCTORATES**						[redacted]	**OTHER NON-FACULTY RESEARCH STAFF WITH DOCTORATES (G)**
		SOURCE OF SUPPORT							
		FEDERAL			**NON-FEDERAL (D)**	**TOTAL** for all sources (A) through (D) (E)	Of the total in (E), how many are **FOREIGN?** (F)		
		Fellowships (A)	Traineeships (B)	Research grants (C)					
TOTAL	(1)								
Of the total in each cell of line (1), how many are WOMEN?	(2)								
Of the total in each cell of line (1), how many hold an M.D., D.O., D.D.S., or D.V.M. degree?	(3)								

Approximately how many personhours were required to complete this form?

List other Federal sources (agencies), from item 5, column (G), and number of full-time students supported by each:

Please explain variances from the previous year's data or include other comments:

This questionnaire has been printed on recycled paper.

Survey of Graduate Students and Postdoctorates in Science and Engineering

CROSSWALK BETWEEN NSF DISCIPLINE CODES AND THE NCES CLASSIFICATION OF INSTRUCTIONAL PROGRAMS

The following set of discipline codes categorizes the science and engineering departments or programs in the Survey of Graduate Students and Postdoctorates in Science and Engineering. Representative department names are shown under each of the discipline codes.

ENGINEERING

101 AEROSPACE ENGINEERING
- 14.02 AEROSPACE, AERONAUTICAL, AND ASTRONAUTICAL ENGR.

102 AGRICULTURAL ENGINEERING
- 14.03 AGRICULTURAL ENGINEERING

103 BIOMEDICAL ENGINEERING
- 14.05 BIOENGINEERING AND BIOMEDICAL ENGINEERING

104 CHEMICAL ENGINEERING
- 03.0509 WOOD SCIENCE
- 14.07 CHEMICAL ENGINEERING
- 14.32 POLYMER/PLASTICS ENGINEERING

105 CIVIL ENGINEERING
- 04.02 ARCHITECTURE
- 14.04 ARCHITECTURAL ENGINEERING
- 14.08 CIVIL ENGINEERING
- 14.0803 STRUCTURAL ENGINEERING
- 14.0805 WATER RESOURCES ENGINEERING
- 14.14 ENVIRONMENTAL/ENVIRONMENTAL HEALTH ENGINEERING

106 ELECTRICAL ENGINEERING
- 14.09 COMPUTER ENGINEERING
- 14.10 ELECTRICAL, ELECTRONICS, AND COMMUNICATIONS ENGR.

107 ENGINEERING SCIENCE AND ENGINEERING PHYSICS
- 14.12 ENGINEERING PHYSICS
- 14.13 ENGINEERING SCIENCE

108 INDUSTRIAL/MANUFACTURING ENGINEERING
- 14.17 INDUSTRIAL/MANUFACTURING ENGINEERING
- 14.27 SYSTEMS ENGINEERING
- 14.30 ENGINEERING/INDUSTRIAL MANAGEMENT
- 30.06 SYSTEMS SCIENCE

109 MECHANICAL ENGINEERING
- 14.11 ENGINEERING MECHANICS
- 14.19 MECHANICAL ENGINEERING

110 METALLURGICAL AND MATERIALS ENGINEERING
- 14.06 CERAMIC SCIENCES AND ENGINEERING
- 14.18 MATERIALS ENGINEERING
- 14.20 METALLURGICAL ENGINEERING
- 14.28 TEXTILE SCIENCES AND ENGINEERING
- 14.31 MATERIALS SCIENCE
- 40.0701 METALLURGY

111 MINING ENGINEERING
- 14.15 GEOLOGICAL ENGINEERING
- 14.16 GEOPHYSICAL ENGINEERING
- 14.21 MINING AND MINERAL ENGINEERING

112 NUCLEAR ENGINEERING
- 14.23 NUCLEAR ENGINEERING

113 PETROLEUM ENGINEERING
- 14.25 PETROLEUM ENGINEERING

114 ENGINEERING, N.E.C.
- 14.01 ENGINEERING, GENERAL
- 14.22 NAVAL ARCHITECTURE AND MARINE ENGINEERING
- 14.24 OCEAN ENGINEERING
- 14.29 ENGINEERING DESIGN
- 14.99 ENGINEERING, OTHER

PHYSICAL SCIENCES

201 ASTRONOMY
- 40.02 ASTRONOMY
- 40.03 ASTROPHYSICS

202 CHEMISTRY
- 40.05 CHEMISTRY (SEE ALSO 602)
- 40.0507 POLYMER CHEMISTRY

203 PHYSICS
- 40.08 PHYSICS (SEE ALSO 605)
- 40.0807 OPTICS
- 40.0809 ACOUSTICS

204 PHYSICAL SCIENCES, N.E.C.
- 40.01 PHYSICAL SCIENCES, GENERAL
- 40.0799 MISCELLANEOUS PHYSICAL SCIENCES, OTHER
- 40.99 PHYSICAL SCIENCES, OTHER

EARTH, ATMOSPHERIC, AND OCEAN SCIENCES

301 ATMOSPHERIC SCIENCES
- 40.04 ATMOSPHERIC SCIENCES AND METEOROLOGY

302 GEOSCIENCES
- 40.06 GEOLOGICAL AND RELATED SCIENCES
- 40.0703 EARTH AND PLANETARY SCIENCES

303 OCEAN SCIENCES
- 26.0607 MARINE/AQUATIC BIOLOGY
- 40.0702 OCEANOGRAPHY

304 EARTH, ATMOSPHERIC, AND OCEAN SCIENCES, N.E.C.

MATHEMATICAL SCIENCES

402 MATHEMATICS AND APPLIED MATHEMATICS
- 27.01 MATHEMATICS
- 27.03 APPLIED MATHEMATICS
- 27.0302 OPERATIONS RESEARCH
- 27.99 MATHEMATICS, OTHER
- 30.08 MATHEMATICS AND COMPUTER SCIENCE

403 STATISTICS
- 27.05 MATHEMATICAL STATISTICS
- 52.0802 ACTUARIAL SCIENCE

COMPUTER SCIENCE

401 COMPUTER SCIENCE
- 11.01 COMPUTER AND INFORMATION SCIENCES, GENERAL
- 11.04 INFORMATION SCIENCES AND SYSTEMS
- 11.07 COMPUTER SCIENCE
- 52.1201 MANAGEMENT INFORMATION SYSTEMS
- 52.1301 MANAGEMENT SCIENCE

AGRICULTURAL SCIENCES (SEE ALSO 102 AND 901)

501 AGRICULTURAL SCIENCES
- 02.01 AGRICULTURE/AGRICULTURAL SCIENCES
- 02.02 ANIMAL SCIENCES
- 02.03 FOOD SCIENCES
- 02.04 PLANT SCIENCES
- 02.05 SOIL SCIENCES
- 02.99 AGRICULTURAL SCIENCES, OTHER
- 03.01 NATURAL RESOURCES CONSERVATION
- 03.02 CONSERVATION AND REGULATION
- 03.03 FISHING AND FISHERIES SCIENCES AND MANAGEMENT
- 03.05 FORESTRY AND RELATED SCIENCES
- 03.06 WILDLIFE AND WILDLANDS MANAGEMENT
- 03.99 CONSERVATION AND RENEWABLE NATURAL RESOURCES, OTHER

BIOLOGICAL SCIENCES

601 ANATOMY
- 26.0601 ANATOMY
- 51.1301 MEDICAL ANATOMY

602 BIOCHEMISTRY
- 26.0202 BIOCHEMISTRY
- 51.1302 MEDICAL BIOCHEMISTRY

603 BIOLOGY
- 26.01 BIOLOGY, GENERAL

604 BIOMETRY AND EPIDEMIOLOGY
- 26.0614 BIOMETRICS
- 26.0615 BIOSTATISTICS
- 51.1303 MEDICAL BIOMATHEMATICS AND BIOMETRICS
- 51.2203 EPIDEMIOLOGY

605 BIOPHYSICS
- 26.0203 BIOPHYSICS
- 51.1304 MEDICAL BIOPHYSICS/PHYSICS

606 BOTANY
- 26.03 BOTANY (EXCLUDING 26.05 MICROBIOLOGY/BACTERIOLOGY—SEE 611)
- 26.0305 PLANT PATHOLOGY
- 26.0307 PLANT PHYSIOLOGY

607 CELL AND MOLECULAR BIOLOGY
- 26.04 CELL AND MOLECULAR BIOLOGY
- 26.0401 CELL BIOLOGY
- 26.0402 MOLECULAR BIOLOGY
- 51.1305 MEDICAL CELL BIOLOGY
- 51.1309 MEDICAL MOLECULAR BIOLOGY

608 ECOLOGY
- 26.0603 ECOLOGY

609 ENTOMOLOGY AND PARASITOLOGY
- 26.0610 PARASITOLOGY
- 26.0702 ENTOMOLOGY

610 GENETICS
- 26.0613 GENETICS, PLANT AND ANIMAL
- 26.0617 EVOLUTIONARY BIOLOGY
- 51.1306 MEDICAL GENETICS

611 MICROBIOLOGY, IMMUNOLOGY, AND VIROLOGY
- 26.05 MICROBIOLOGY/BACTERIOLOGY
- 26.0618 BIOLOGICAL IMMUNOLOGY
- 26.0619 VIROLOGY
- 51.1308 MEDICAL MICROBIOLOGY

612 NUTRITION
- 19.05 FOODS AND NUTRITION STUDIES
- 26.0609 NUTRITIONAL SCIENCES
- 51.1311 MEDICAL NUTRITION

613 PATHOLOGY
- 26.0704 PATHOLOGY, HUMAN AND ANIMAL
- 51.1312 MEDICAL PATHOLOGY

614 PHARMACOLOGY
- 26.0612 TOXICOLOGY
- 26.0705 PHARMACOLOGY, HUMAN AND ANIMAL
- 51.1314 MEDICAL TOXICOLOGY

615 PHYSIOLOGY
- 26.0706 PHYSIOLOGY, HUMAN AND ANIMAL
- 51.1313 MEDICAL PHYSIOLOGY

616 ZOOLOGY
- 26.07 ZOOLOGY

617 BIOSCIENCES, N.E.C.
- 26.0616 BIOTECHNOLOGY RESEARCH
- 26.0699 MISCELLANEOUS BIOLOGICAL SPECIALIZATIONS, OTHER
- 26.99 BIOLOGICAL SCIENCES/LIFE SCIENCES, OTHER
- 30.01 BIOLOGICAL AND PHYSICAL SCIENCES
- 30.10 BIOPSYCHOLOGY

PSYCHOLOGY

801 PSYCHOLOGY, COMBINED
- 42.01 PSYCHOLOGY, GENERAL

802 PSYCHOLOGY, EXCEPT CLINICAL
- 42.03 COGNITIVE PSYCHOLOGY AND PSYCHOLINGUISTICS
- 42.04 COMMUNITY PSYCHOLOGY
- 42.07 DEVELOPMENTAL AND CHILD PSYCHOLOGY
- 42.08 EXPERIMENTAL PSYCHOLOGY
- 42.09 INDUSTRIAL AND ORGANIZATIONAL PSYCHOLOGY
- 42.11 PHYSIOLOGICAL PSYCHOLOGY/PSYCHOBIOLOGY
- 42.16 SOCIAL PSYCHOLOGY
- 42.17 SCHOOL PSYCHOLOGY
- 42.99 PSYCHOLOGY, OTHER
- 51.2301 ART THERAPY
- 51.2303 HYPNOTHERAPY
- 51.2705 PSYCHOANALYSIS

803 CLINICAL PSYCHOLOGY
- 42.02 CLINICAL PSYCHOLOGY

SOCIAL SCIENCES

901 AGRICULTURAL ECONOMICS
- 01.0101 AGRICULTURAL BUSINESS AND MANAGEMENT, GENERAL
- 01.0102 AGRICULTURAL BUSINESS/AGRIBUSINESS OPERATIONS
- 01.0103 AGRICULTURAL ECONOMICS

902 ANTHROPOLOGY (CULTURAL AND SOCIAL)
- 45.02 ANTHROPOLOGY
- 45.03 ARCHAEOLOGY

903 ECONOMICS
- 45.06 ECONOMICS
- 52.06 BUSINESS/MANAGERIAL ECONOMICS

904 GEOGRAPHY
- 45.0701 GEOGRAPHY
- 45.0702 CARTOGRAPHY

905 HISTORY AND PHILOSOPHY OF SCIENCE
- 45.0804 HISTORY AND PHILOSOPHY OF SCIENCE

906 LINGUISTICS
- 16.0102 LINGUISTICS

907 POLITICAL SCIENCE/PUBLIC ADMINISTRATION
- 44.04 PUBLIC ADMINISTRATION
- 44.05 PUBLIC POLICY ANALYSIS
- 44.99 PUBLIC ADMINISTRATION AND SERVICES, OTHER
- 45.09 INTERNATIONAL RELATIONS AND AFFAIRS
- 45.10 POLITICAL SCIENCE AND GOVERNMENT

908 SOCIOLOGY
- 45.05 DEMOGRAPHY AND POPULATION STUDIES
- 45.11 SOCIOLOGY

909 SOCIOLOGY/ANTHROPOLOGY

910 SOCIAL SCIENCES, N.E.C.
- 04.03 CITY/URBAN, COMMUNITY, AND REGIONAL PLANNING
- 04.07 ARCHITECTURAL URBAN DESIGN AND PLANNING
- 05 AREA, ETHNIC, AND CULTURAL STUDIES
- 30.11 GERONTOLOGY
- 43.01 CRIMINAL JUSTICE AND CORRECTIONS
- 44.02 COMMUNITY ORGANIZATION, RESOURCES, AND SERVICES
- 45.01 SOCIAL SCIENCES, GENERAL
- 45.04 CRIMINOLOGY
- 45.12 URBAN AFFAIRS/STUDIES
- 45.99 SOCIAL SCIENCES, OTHER

HEALTH FIELDS (SEE ALSO 103)

701 ANESTHESIOLOGY
- 51.1604 NURSING ANESTHETIST (POST-R.N.)

702 CARDIOLOGY

703 ONCOLOGY/CANCER RESEARCH

704 ENDOCRINOLOGY

705 GASTROENTEROLOGY

706 HEMATOLOGY

707 NEUROLOGY
- 26.0608 NEUROSCIENCE

708 OBSTETRICS AND GYNECOLOGY

709 OPHTHALMOLOGY
- 51.1701 OPTOMETRY (O.D.)

710 OTORHINOLARYNGOLOGY

711 PEDIATRICS

712 PREVENTIVE MEDICINE AND COMMUNITY HEALTH
- 51.22 PUBLIC HEALTH
- 51.2202 ENVIRONMENTAL HEALTH

713 PSYCHIATRY
- 51.1610 NURSING, PSYCHIATRY/MENTAL HEALTH (POST-R.N.)

714 PULMONARY DISEASE

715 RADIOLOGY
- 26.0611 RADIATION BIOLOGY/RADIOBIOLOGY

716 SURGERY

717 CLINICAL MEDICINE, N.E.C.
- 51.1399 MEDICAL BASIC SCIENCES, OTHER
- 51.1201 MEDICINE (M.D.)
- 51.14 MEDICAL CLINICAL SCIENCES (M.S., Ph.D.)
- 51.19 OSTEOPATHIC MEDICINE (D.O.)
- 51.21 PODIATRY (D.P.M., D.P., Pod.D.)

718 DENTAL SCIENCES
- 51.04 DENTISTRY (D.D.S., D.M.D.)
- 51.05 DENTAL CLINICAL SCIENCES/GRAD. DENTISTRY (M.S., Ph.D.)

719 NURSING
- 51.16 NURSING
  (EXCLUDING 51.1610, NURSING, PSYCHIATRY/MENTAL HEALTH—SEE 713, AND 51.1604 NURSING ANESTHETIST—SEE 701)

720 PHARMACEUTICAL SCIENCES
- 51.20 PHARMACY

721 VETERINARY SCIENCES
- 51.24 VETERINARY MEDICINE (D.V.M.)
- 51.25 VETERINARY CLINICAL SCIENCES (M.S., Ph.D.)

722 HEALTH-RELATED, N.E.C.
- 31.0505 EXERCISE SCIENCE/PHYSIOLOGY AND MOVEMENT STUDIES
- 51.2306 OCCUPATIONAL THERAPY
- 51.2308 PHYSICAL THERAPY
- 51.2399 REHABILITATION/THERAPEUTIC SERVICES, OTHER
- 51.2704 NATUROPATHIC MEDICINE
- 51.99 HEALTH PROFESSIONS AND RELATED SCIENCES, OTHER

723 COMMUNICATION DISORDERS SCIENCES
- 51.02 COMMUNICATION DISORDERS SCIENCES AND SERVICES
- 51.0201 COMMUNICATION DISORDERS, GENERAL
- 51.0202 AUDIOLOGY/HEARING SCIENCES
- 51.0203 SPEECH-LANGUAGE PATHOLOGY
- 51.0204 SPEECH-LANGUAGE PATHOLOGY AND AUDIOLOGY

N.E.C. = not elsewhere classified

REV. 9-96

List of Doctorate-granting and Master's-granting Institutions

Table II-1. Doctorate-granting institutions in the fall 1996 NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering

FICE code		State, institution, and school
		Alabama
001002	H L	Alabama A & M University
008695	L	Auburn University
		Graduate School (Main Campus)
		Graduate School at Montgomery
001052		University of Alabama at Birmingham, The
		Graduate School
		School of Medicine
001055		University of Alabama in Huntsville, The
001051		University of Alabama, The
001057		University of South Alabama
		College of Medicine
		Graduate School
		Alaska
029094	L	University of Alaska at Fairbanks
		Arizona
001081		Arizona State University
001082		Northern Arizona University
001083	L	University of Arizona
		College of Medicine
		Graduate School
		Arkansas
001108	L	University of Arkansas
001109		University of Arkansas - Med Sci Campus
		California
001122		Biola University
009844		Cal Scnl of Prof Psych Berkeley/Alameda
011881		Calif Sch of Prof Psych - Fresno
010013		Calif Sch of Prof Psych - Los Angeles
011117		Calif Sch of Prof Psych - San Diego
012154		California Institute of Integral Studies
001131		California Institute of Technology
001139		California State University, Long Beach
000166		Charles R. Drew Univ of Medicine & Sci
001169		Claremont Graduate School
029092		Fielding Institute, The
001200		Fuller Theological Seminary
001205		Golden Gate University
001218		Loma Linda University
		Graduate School
		School of Medicine
029225		Pacific Graduate School of Psychology
001264		Pepperdine University
010441		RAND Graduate School of Policy Studies
001151		San Diego State University
001326		Santa Clara University
001305		Stanford University
		Graduate School
		School of Medicine
001158		US International University
001310		US Naval Postgraduate School
001312	L	University of Calif at Berkeley
001313	L	University of Calif at Davis
001316	L	University of Calif at Riverside
001317	L	University of Calif at San Diego
		Graduate School

FICE code		State, institution, and school
		California, continued
		School of Medicine
001319	L	University of Calif at San Francisco
001320	L	University of Calif at Santa Barbara
001321	L	University of Calif at Santa Cruz
001314	L	University of California, Irvine
		College of Medicine
		Graduate School
001315	L	University of California, Los Angeles
		Graduate School
		School of Medicine
001216		University of La Verne
010395		University of San Diego
001328		University of Southern California
		Graduate School
		School of Medicine
001329		University of the Pacific
008846		Wright Institute, The
		Colorado
001348		Colorado School of Mines
001350	L	Colorado State University
008717		University of Colorado
		Graduate School at Boulder
		Graduate School at Colorado Springs
		Graduate School at Denver
		Health Sciences Center
001371		University of Denver
001349		University of Northern Colorado
		Connecticut
008718		University of Connecticut
		Graduate School
		Health Center
001422		University of Hartford
001424		Wesleyan University
001426		Yale University
		Graduate School
		School of Medicine
		School of Nursing
		Delaware
001431	L	University of Delaware
		District of Columbia
001434		American University
001437		Catholic University of America
001444		George Washington University
		Graduate School
		School of Medicine and Health Sciences
001445		Georgetown University
		Graduate School
		School of Medicine
001448	H	Howard University
		College of Medicine
		Graduate School
		Florida
001480	H L	Florida A & M University

KEY: H = Historically black college or university
L = Land grant institution

BEST COPY AVAILABLE

Table II-1. Doctorate-granting institutions in the fall 1996 NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering

FICE code		State, institution, and school
		Florida, continued
001481		Florida Atlantic University
001469		Florida Institute of Technology
009635		Florida International University
001489	L	Florida State University
001509		Nova Southeastern University
003954		University of Central Florida
001535		University of Florida
		College of Medicine
		College of Nursing
		Graduate School
001536		University of Miami
		Graduate School
		School of Medicine
001537		University of South Florida
		College of Medicine
		Graduate School
		Georgia
001659	H	Clark Atlanta University
001564		Emory University
		Graduate School
		School of Medicine
008723		Georgia Institute of Technology
001574		Georgia State University
005010		Institute of Paper Science & Technology
001579		Medical College of Georgia
008724		Mercer University
		Graduate School
		School of Medicine
		Southern School of Pharmacy
029297	H	Morehouse School of Medicine
001598	L	University of Georgia
		Hawaii
001610	L	University of Hawaii at Manoa
		Graduate School
		John A. Burns School of Medicine
		Idaho
001620		Idaho State University
001626	L	University of Idaho
		Illinois
029230		Chicago School of Prof Psych
001671		DePaul University
001659		Finch U of Hlth Sci/The Chicago Med Scn
001691		Illinois Institute of Technology
001692		Illinois State University
001710		Loyola University of Chicago
		Graduate School
		Graduate School at the Medical Center
		Stritch School of Medicine
001657		Midwestern University
001737		Northern Illinois University
001739		Northwestern University
		Graduate School
		Medical School
009800		Rush University

FICE code		State, institution, and school
		Illinois, continued
001758		Southern Illinois Univ at Carbondale
001775	L	Univ of Illinois at Urbana-Champaign
001774		University of Chicago
		Graduate School
		Pritzker School of Medicine
001776	L	University of Illinois at Chicago
		Indiana
001786		Ball State University
001807		Indiana State University
008731		Indiana University
		Graduate School-Bloomington
		Indiana Univ-Purdue Univ at Fort Wayne
		Indiana University-Purdue University
		School of Dentistry
		School of Medicine
008732	L	Purdue University
		Graduate School
		Purdue University Calumet
001840		University of Notre Dame
		Iowa
001869	L	Iowa State University
011113		Maharishi University of Management
001865		Univ of Osteopathic Med & Health Sci
001892		University of Iowa
		College of Medicine
		Graduate School
001890		University of Northern Iowa
		Kansas
001928	L	Kansas State University
029001		University of Kansas
		Graduate School
		Medical Center
001950		Wichita State University
		Kentucky
001960		Spalding University
008744	L	University of Kentucky
		College of Medicine
		Graduate School
001999		University of Louisville
		Graduate School
		School of Medicine
		Louisiana
008745	L	Louisiana State University
		Medical Center at New Orleans
		School of Medicine in Shreveport
		The Graduate School in Baton Rouge
		University of New Orleans
002008		Louisiana Tech University
002020		Northeast Louisiana University
002029		Tulane University
		Graduate School
		School of Medicine

KEY: H = Historically black college or university
L = Land grant institution

Table II-1. Doctorate-granting institutions in the fall 1996 NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering

FICE code	State, institution, and school
	Louisiana, continued
	School of Public Health & Tropical Med
002031	University of Southwestern Louisiana
002032 H	Xavier University of Louisiana
	Maine
002053 L	University of Maine
002050	University of New England
	Col of Professional & Continuing Studies
	College of Osteopathic Medicine
	Maryland
002077	Johns Hopkins University
	Graduate School
	School of Hygiene and Public Health
	School of Medicine
029169	Uniformed Serv Univ of the Hlth Sciences
002105 L	Univ of Maryland - Baltimore County
002103 L	University of Maryland - College Park
002106 H	University of Maryland Eastern Shore
002104 L	University of Maryland at Baltimore
	Massachusetts
002114	American International College
002128	Boston College
002130	Boston University
	Graduate School
	School of Dentistry
	School of Medicine
	School of Public Health
002133	Brandeis University
002139	Clark University
002146	Emerson College
002155	Harvard University
	Graduate School of Arts & Sciences
	Harvard Medical School
	School of Public Health
002165	Mass College of Pharmacy/Allied Health
002178 L	Massachusetts Institute of Technology
002199	Northeastern University
002209	Smith College
002219	Tufts University
	Graduate School
	Sackler Sch of Grad Biomedical Sciences
	School of Medicine
	School of Nutrition
008755 L	University of Massachusetts
	Univ of Massachusetts at Amherst
	Univ of Massachusetts at Worcester
	University of Massachusetts Boston
002161	University of Massachusetts Lowell
002230	Woods Hole Oceanographic Institution
002233	Worcester Polytechnic Institute
	Michigan
002238	Andrews University
002243	Central Michigan University
002290 L	Michigan State University
002292	Michigan Technological University
	Michigan, continued
002307	Oakland University
002323	University of Detroit Mercy
009091	University of Michigan
	Graduate School at Ann Arbor
	Graduate School at Dearborn
	Medical School at Ann Arbor
002329	Wayne State University
	Graduate School
	School of Medicine
002330	Western Michigan University
	Minnesota
010337	Mayo Graduate School
008761 L	University of Minnesota
	Duluth School of Medicine
	Graduate School at Duluth
	Graduate School at Minneapolis
	Minneapolis Medical School
025042	Walden University
	Mississippi
002410 H	Jackson State University
002423 L	Mississippi State University
008764	University of Mississippi
	Graduate School
	School of Medicine
002441	University of Southern Mississippi
	Missouri
029239	Forest Institute of Professional Psych
002477	Kirksville College of Osteopathic Med
008766	Saint Louis University
	Graduate School
	School of Medicine
002474	University of Health Sciences, The
002516 L	University of Missouri - Columbia
	Graduate School
	School of Medicine
002518 L	University of Missouri - Kansas City
002517 L	University of Missouri - Rolla
002519 L	University of Missouri - St Louis
002520	Washington University
	Graduate School
	School of Medicine
	Montana
002532 L	Montana State University - Bozeman
002536	University of Montana
	Nebraska
002542	Creighton University
	Graduate School
	School of Medicine
002565	University of Nebraska - Lincoln
002554 L	University of Nebraska - Omaha
006895	University of Nebraska Medical Center

KEY: H = Historically black college or university
L = Land grant institution

BEST COPY AVAILABLE

Table II-1. Doctorate-granting institutions in the fall 1996 NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering

FICE code	State, institution, and school
	Nevada
002569	University of Nevada at Las Vegas
002568	L University of Nevada at Reno
	Graduate School
	School of Medical Sciences
	New Hampshire
002573	Dartmouth College
	Graduate School
	School of Medicine
002589	L University of New Hampshire
	New Jersey
008770	Fairleigh Dickinson University
002621	New Jersey Institute of Technology
002627	Princeton University
008771	L Rutgers the State Univ of New Jersey
	Graduate School at Camden
	Graduate School at New Brunswick
	Graduate School at Newark
	School of Criminal Justice
002632	Seton Hall University
002639	Stevens Institute of Technology
002620	Univ of Med and Dentistry of New Jersey
	Grad Sch of Biomed Sci/NJ Med School
	New Jersey Medical School at Newark
	New Jersey School of Osteopathic Med
	Robert Wood Johnson Medical School
	New Mexico
002654	New Mexico Institute of Mining and Tech
008773	L New Mexico State University
002663	University of New Mexico
	Graduate School
	School of Medicine
	New York
002666	Adelphi University
002887	Albany Medical College
008775	Alfred University
004063	CUNY Graduate School and Univ Center
007022	CUNY Herbert H. Lehman College
007026	CUNY Mt. Sinai School of Medicine
002699	Clarkson University
002707	Columbia Univ in the City of New York
	College of Physicians and Surgeons
	Graduate School
008779	L Cornell University
	Graduate School
	Graduate School of Medical Sciences
	Medical College
002722	Fordham University
002732	Hofstra University
008780	Long Island University
	Brentwood Center
	Brooklyn Center
	C. W. Post Center
	Rockland Campus
	Westchester Center

FICE code	State, institution, and school
	New York, continued
002780	New School for Social Research
008782	New York Institute of Technology
	Graduate School
	New York College of Osteopathic Med
002784	New York Medical College
002785	New York University
	Graduate School
	School of Medicine
	Wagner Graduate School of Public Service
008784	Pace University
002796	Polytechnic University
002803	Rensselaer Polytechnic Institute
002806	Rochester Institute of Technology
002840	SUNY Health Science Center at Syracuse
002851	SUNY College of Env Science and Forestry
009929	SUNY College of Optometry
002839	SUNY Health Science Center at Brooklyn
002835	SUNY at Albany
002836	SUNY at Binghamton
009554	SUNY at Buffalo
	Graduate School
	School of Medicine
009555	SUNY at Stony Brook
	Graduate School
	School of Medicine
002823	Saint John's University
008789	Syracuse University
003979	Teachers College, Columbia University
002807	The Rockefeller University
002889	Union College
002894	University of Rochester
	Graduate School
	School of Medicine and Dentistry
002903	Yeshiva University
	Albert Einstein College of Medicine
	Graduate School
	North Carolina
002920	Duke University
	Graduate School
	School of Medicine
002923	East Carolina University
	Graduate School
	School of Medicine
002972	L North Carolina State University
002974	Univ of North Carolina at Chapel Hill
	Graduate School
	School of Medicine
002976	Univ of North Carolina at Greensboro
002978	Wake Forest University
	Bowman Gray School of Medicine
	Graduate School
	North Dakota
009266	L North Dakota State University
008794	University of North Dakota
	Ohio
003009	Air Force Institute of Technology

KEY: H = Historically black college or university
L = Land grant institution

Table II-1. Doctorate-granting institutions in the fall 1996 NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering

FICE code	State, institution, and school
	Ohio, continued
008795	Antioch University
008796	Bowling Green State University
003024	Case Western Reserve University
	Graduate School
	School of Medicine
003032	Cleveland State University
008799	Kent State University
007737	Medical College of Ohio at Toledo
008800	Miami University
029045	NE Ohio Universities College of Medicine
008802 L	Ohio State University, The
	College of Medicine
	Graduate School
008803	Ohio University
	College of Osteopathic Medicine
	Graduate College
010923	Union Institute
012310	University of Akron
008805	University of Cincinnati
	College of Medicine
	Graduate School
003127	University of Dayton
003131	University of Toledo
009167	Wright State University
	Oklahoma
008806 L	Oklahoma State University
008807	University of Oklahoma
	Graduate College
	Health Sciences Center
003185	University of Tulsa
	Oregon
008856	Oregon Grad Inst of Science & Technology
004882	Oregon Health Sciences University
003210 L	Oregon State University
003212	Pacific University
003216	Portland State University
003223	University of Oregon
	Pennsylvania
003271	Allegheny Univ. of the Health Sciences
003237	Bryn Mawr College
003242	Carnegie-Mellon University
003256	Drexel University
003258	Duquesne University
008810	Indiana University of Pennsylvania
003289	Lehigh University
008813 L	Pennsylvania State University
	College of Medicine
	Graduate School
003352	Philadelphia Col of Osteopathic Med
003353	Philadelphia Coll of Pharmacy and Sci
003371	Temple University
	Graduate School
	School of Medicine
	School of Pharmacy
003378	Thomas Jefferson University
003378	University of Pennsylvania
	Graduate School
	School of Medicine
008815	University of Pittsburgh
	Graduate School
	School of Medicine
003388	Villanova University
029291	Widener University
	Rhode Island
003401	Brown University
003414 L	University of Rhode Island
	South Carolina
003425 L	Clemson University
003438	Medical University of South Carolina
008819	University of South Carolina
	Graduate School
	Medical School
	South Dakota
003470	South Dakota School of Mines and Tech
003471 L	South Dakota State University
003474	University of South Dakota
	Graduate School
	School of Medicine
	Tennessee
003487	East Tennessee State University
003506 H	Meharry Medical College
003510	Middle Tennessee State University
003522 H L	Tennessee State University
003523	Tennessee Technological University
003509	University of Memphis
003530 L	University of Tennessee at Knoxville
006725 L	University of Tennessee, Memphis
003535	Vanderbilt University
	Graduate School
	School of Medicine
	Texas
004948	Baylor College of Dentistry
004949	Baylor College of Medicine
003545	Baylor University
003581	Lamar University-Beaumont
003604	Rice University
003606	Sam Houston State University
003613	Southern Methodist University
003615	Southwest Texas State University
003624	Stephen F. Austin State University
003632 L	Texas A & M University
003565	Texas A&M University-Commerce
003636	Texas Christian University
003644	Texas Tech University
	Graduate School
	Health Science Center
003646	Texas Woman's University
009768	U of North TX Hlth Sci Ctr at Ft Worth
003659	Univ of Texas Hlth Sci Ctr San Antonio

KEY: H = Historically black college or university
L = Land grant institution

BEST COPY AVAILABLE

Table II-1. Doctorate-granting institutions in the fall 1996 NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering

FICE code	State, institution, and school
	Texas, continued
011618	Univ of Texas Hlth Sci Ctr at Houston
003657	Univ of Texas M.D. Anderson Cancer Ctr
004952	Univ of Texas Med Branch at Galveston
003660	Univ of Texas Sw Medical Ctr at Dallas
003656	Univ of Texas at Arlington
003652	University of Houston
013231	University of Houston - Victoria
003594	University of North Texas
003658	University of Texas at Austin
009741	University of Texas at Dallas
003661	University of Texas at El Paso
	Utah
012305	Brigham Young University
003675	University of Utah
	Graduate School
	School of Medicine
003677 L	Utah State University
	Vermont
003696 L	University of Vermont
	College of Medicine
	Graduate School
	Virginia
008828	College of William and Mary
010338	Eastern Virginia Medical School
003749	George Mason University
003714 H	Hampton University
003717	Institute of Textile Technology
003728	Old Dominion University
003745	University of Virginia
	Graduate School
	School of Medicine
003735	Virginia Commonwealth University
	Graduate School
	Medical College of Virginia
003754 L	Virginia Polytechnic Inst and State Univ
	Washington
003798	University of Washington -Seattle
	Graduate School
	School of Medicine
	School of Public Health and Comm Med
003800 L	Washington State University
	West Virginia
003815	Marshall University
	Graduate School
	School of Medicine
011245	West Virginia School of Osteopathic Med
003827 L	West Virginia University
	Graduate School
	School of Medicine
	Wisconsin
003863	Marquette University

FICE code	State, institution, and school
	Wisconsin, continued
008296	Medical College of Wisconsin
003895 L	University of Wisconsin - Madison
	Graduate School
	Medical School
003896	University of Wisconsin - Milwaukee
	Wyoming
003932 L	University of Wyoming
	Puerto Rico
010724	Caribbean Center for Advanced Studies
029068	Ponce School of Medicine
003936	The Pontifical Cath Univ of Puerto Rico
003944 L	Univ of Puerto Rico Mayaguez Campus
007108 L	Univ of Puerto Rico Rio Piedras Campus
003945 L	University of Puerto Rico Med Sci Campus

KEY: H = Historically black college or university
L = Land grant institution

Table II-2. Master's-granting institutions in the fall 1996 NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering

FICE code	State, institution, and school
	Alabama
001005 H	Alabama State University
001020	Jacksonville State University
001049	Troy State University in Montgomery
001050 H	Tuskegee University
001004	University of Montevallo
	Alaska
029095	University of Alaska Anchorage
029096	University of Alaska Southeast
	Arkansas
008701	Arkansas State University
001101	University of Arkansas at Little Rock
001092	University of Central Arkansas
	California
001117	Azusa Pacific University
001143	Calif Poly State Univ, San Luis Obispo
001141	Calif State Univ at Dominguez Hills
001137	Calif State Univ at Fullerton
001140	Calif State Univ at Los Angeles
001150	Calif State University at Sacramento
001157	Calif State University, Stanislaus
001144	California State Poly University, Pomona
007993	California State Univ - Bakersfield
001142	California State Univ, San Bernadino
001146	California State University, Chico
001147	California State University, Fresno
001138	California State University, Hayward
001153	California State University, Northridge
001164	Chapman University
001196	Dominican College of San Rafael
001171	Harvey Mudd College
001149	Humboldt State University
004484	John F Kennedy University
011649	Loyola Marymount University
011460	National University
001249	Occidental College
001257	Pacific States University
001154	San Francisco State University
001155	San Jose State University
001156	Sonoma State University
001324	University of Redlands
001325	University of San Francisco
	Colorado
023662	National Technological University
	Connecticut
001378	Central Connecticut State University
001379	Connecticut College
002804	Hartford Graduate Center, The
001402	Quinnipiac College
001406	Southern Connecticut State University
001409	St. Joseph College
001414	Trinity College
001416	University of Bridgeport

FICE code	State, institution, and school
	Connecticut, continued
001397	University of New Haven
001380	Western Connecticut State University
	Delaware
001428 H L	Delaware State University
	District of Columbia
001443	Gallaudet University
029100 H L	University of the District of Columbia
	Florida
001479	Embry-Riddle Aeronautical University
003955	University of West Florida
	Georgia
001552	Augusta State University
001602	Georgia College and State University
001572	Georgia Southern University
001601	State University of West Georgia
001599	Valdosta State University
	Illinois
001641	Bradley University
001694	Chicago State University
001674	Eastern Illinois University
009145	Governors State University
001693	Northeastern Illinois University
001749	Roosevelt University
001759	Southern Illinois Univ at Edwardsville
009333	University of Illinois at Springfield
001780	Western Illinois University
	Indiana
001788	Butler University
001822	Indiana Wesleyan University
001830	Rose-Hulman Institute of Technology
001832	Saint Francis College
001795	University of Evansville
001842	Valparaiso University
	Iowa
001860	Drake University
001873	Loras College
001876	Marycrest International Univ
	Kansas
001927	Emporia State University
001915	Fort Hays State University
001926	Pittsburg State University
001949	Washburn University of Topeka
	Kentucky
001963	Eastern Kentucky University

KEY: H = Historically black college or university
L = Land grant institution

Table II-2. Master's-granting institutions in the fall 1996 NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering

FICE code	State, institution, and school
	Kentucky, continued
001976	Morehead State University
001977	Murray State University
002002	Western Kentucky University
	Louisiana
002006 H	Grambling State University
002016	Loyola University New Orleans
002017	McNeese State University
002005	Nicholls State University
002021	Northwestern State University
002024	Southeastern Louisiana University
002025 H L	Southern University A & M. All Campuses
	Maryland
002068 H	Coppin State College
002072	Frostburg State University
002076	Hood College
002078	Loyola College
002083 H	Morgan State University
002099	Towson State University
002102	University of Baltimore
002108	Washington College
	Massachusetts
002117	Anna Maria College
002118	Assumption College
002183	Bridgewater State College
002185	Framingham State College
029365	HCA Institute of Health Professions
002192	Mount Holyoke College
002188	Salem State College
002213	University of Massachusetts Dartmouth
002206	Western New England College
002204	Williams College
002190	Worcester State College
	Michigan
002259	Eastern Michigan University
002266	Grand Valley State University
000301	Northern Michigan University
	Minnesota
002336	Bemidji State University
002360	Mankato State University
002367	Moorhead State University
002380	Saint Mary's University of Minnesota
002377	St. Cloud State University
	Mississippi
002422	Mississippi University for Women
	Missouri
002454	Central Missouri State University
002479 H L	Lincoln University
002496	Northwest Missouri State University
	Missouri, continued
002501	Southeast Missouri State University
002503	Southwest Missouri State University
002495	Truman State University
	Montana
002531	Montana Tech of the Univ of Montana
	Nebraska
002551	University of Nebraska at Kearney
	New Hampshire
002566	Rivier College
	New Jersey
002642	College of New Jersey, The
002622	Kean College of New Jersey
002616	Monmouth University
002617	Montclair State University
002625	William Paterson College
	New Mexico
008772	Eastern New Mexico University
002653	New Mexico Highlands University
	New York
004766	CUNY Bernard Baruch College
002667	CUNY Brooklyn College
002688	CUNY City College
029042	CUNY College of Staten Island
002689	CUNY Hunter College
002693	CUNY John Jay College of Crim Justice
002690	CUNY Queens College
002704	College of New Rochelle
002705	College of St Rose
002712	Cooper Union
002737	Iona College
002739	Ithaca College
002758	Manhattan College
002765	Marist College
002788	Niagara University
008786	Russell Sage College
002841	SUNY College at Brockport
002842	SUNY College at Buffalo
002844	SUNY College at Fredonia
002845	SUNY College at Geneseo
002847	SUNY College at Oneonta
002848	SUNY College at Oswego
002849	SUNY College at Plattsburgh
002850	SUNY College at Potsdam
006792	SUNY Inst of Technology at Utica-Rome
002846	SUNY at New Paltz
002813	Sarah Lawrence College
002817	St. Bonaventure University
002895	Vassar College
002899	Wagner College

KEY: H = Historically black college or university
L = Land grant institution

Table II-2. Master's-granting institutions in the fall 1996 NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering

FICE code	State, institution, and school
	North Carolina
002906	Appalachian State University
002905 H L	North Carolina A & T State University
002950 H	North Carolina Central University
002975	Univ of North Carolina at Charlotte
002984	University of North Carolina/Wilmington
002981	Western Carolina University
	Ohio
003050	John Carroll University
003144	Xavier University
003145	Youngstown State University
	Oklahoma
003154	East Central University
003161	Northeastern State University
003181	Southwestern Oklahoma State University
	Oregon
003219	Southern Oregon State College
003224	University of Portland
	Pennsylvania
003315	Bloomsburg University of Pennsylvania
003238	Bucknell University
003316	California University of Pennsylvania
009234	Clarion University of Pennsylvania
003320	East Stroudsburg Univ of Pennsylvania
003321	Edinboro University of Pennsylvania
003266	Gannon University
003322	Kutztown University of Pennsylvania
003324	Mansfield University of Pennsylvania
003296	Marywood College
003325	Millersville University of Pennsylvania
003326	Shippensburg University of Pennsylvania
003327	Slippery Rock University of Pennsylvania
003367	St Joseph's University
003370	Swarthmore College
003384	University of Scranton
003328	West Chester University of Pennsylvania
003394	Wilkes University
	Rhode Island
003407	Rhode Island College
	South Carolina
003428	College of Charleston
003434	Furman University
003456	Winthrop University
	Tennessee
003478	Austin Peay State University
003490 H	Fisk University
003529 L	University of Tennessee at Chattanooga

FICE code	State, institution, and school
	Texas
003537	Abilene Christian University
003541	Angelo State University
003592	Midwestern State University
003630 H L	Prairie View A & M University
003623	St. Mary's University
003625	Sul Ross State University
003631	Tarleton State University
011161	Texas A & M University - Corpus Christi
003639	Texas A & M University-Kingsville
003642 H	Texas Southern University
003647	Trinity University
011854	University of Central Texas
011711	University of Houston at Clear Lake City
003678	University of Incarnate Word
003599	University of Texas - Pan American, The
010115	University of Texas at San Antonio
029164	University of Texas at Tyler
009930	University of Texas of the Permian Basin
003665	West Texas A&M University
	Vermont
004686	Goddard College
003690	Marlboro College
003691	Middlebury College
	Virginia
003715	Hollins College
003721	James Madison University
003732	Radford University
003744	University of Richmond
003764 H L	Virginia State University
	Washington
003771	Central Washington University
003775	Eastern Washington University
003778	Gonzaga University
003785	Pacific Lutheran University
003794	Saint Martin's College
003790	Seattle University
003799	Walla Walla College
003802	Western Washington University
003804	Whitworth College
	West Virginia
003818	University of Charleston
006869	West Virginia Graduate College
003825	West Virginia Institute of Technology
	Wisconsin
003868	Milwaukee School of Engineering
003917	University of Wisconsin - Eau Claire
003899	University of Wisconsin - Green Bay
003919	University of Wisconsin - La Crosse
009630	University of Wisconsin - Oshkosh
003921	University of Wisconsin - Platteville
003923	University of Wisconsin - River Falls
003924	University of Wisconsin - Stevens Point

KEY: H = Historically black college or university
L = Land grant institution

Table II-2. Master's-granting institutions in the fall 1996 NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering

FICE code	State, institution, and school
	Wisconsin, continued
003915	University of Wisconsin - Stout
003926	University of Wisconsin - Whitewater
	Guam
003935	University of Guam

KEY: H = Historically black college or university
L = Land grant institution

The National Science Foundation promotes and advances scientific progress in the United States by competitively awarding grants for research and education in the sciences, mathematics and engineering.

To get the latest information about program deadlines, to download copies of NSF publications, and to access abstracts of awards, visit the NSF Web site at:

http://www.nsf.gov

Location:	4201 Wilson Blvd. Arlington, VA 22230
For General Information (NSF Information Center):	(703) 306-1234
TDD (for the hearing-impaired):	(703) 306-0090
To Order Publications or Forms:	
Send an e-mail to:	pubs@nsf.gov
or telephone:	(301) 947-2722
To Locate NSF Employees:	(703) 306-1234

NSF Division of Science Resources Studies NSF 98-307

Order Form

Please send me the following reports, free of charge:

Title	NSF No.	
Science and Engineering Degrees, Detailed Statistical Tables	97-335	☐
Selected Data on S&E Doctorate Awards: 1996	97-329	☐
Characteristics of Doctoral Scientists and Engineers in the United States: 1995, Detailed Statistical Tables	97-319	☐
"Graduate Enrollment of Women and Minorities in Science and Engineering Continues to Rise," Data Brief	98-302	☐

Check here to receive the latest SRS *Publications List*: ☐

Name	
Address	
City	
State	Zip
Phone	Fax

To order SRS publications, fill out order form, cut on dotted line, fold in half, tape, and drop in the mail. No postage is necessary. Form can also be sent via fax, at 703-306-0510.

NATIONAL SCIENCE FOUNDATION
ARLINGTON, VA 22230

OFFICIAL BUSINESS

PENALTY FOR PRIVATE USE $300

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY CARD

FIRST CLASS PERMIT NO. 12806 ARLINGTON, VA

National Science Foundation
Division of Science Resources Studies
Publications Unit
4201 Wilson Blvd., Suite 965
Arlington, VA 22203-9966

Fold here

Please tape here (do not staple)

The Foundation provides awards for research and education in the sciences and engineering. The awardee is wholly responsible for the conduct of such research and preparation of the results for publication. The Foundation, therefore, does not assume responsibility for the research findings or their interpretation.

The Foundation welcomes proposals from all qualified scientists and engineers and strongly encourages women, minorities, and persons with disabilities to compete fully in any of the research and education related programs described here. In accordance with Federal statutes, regulations, and NSF policies, no person on grounds of race, color, age, sex, national origin, or disability shall be excluded from participation in, be denied the benefits of, or be subject to discrimination under any program or activity receiving financial assistance from the National Science Foundation.

Facilitation Awards for Scientists and Engineers with Disabilities (FASED) provide funding for special assistance or equipment to enable persons with disabilities (investigators and other staff, including student research assistants) to work on NSF projects. See the program announcement or contact the program coordinator at (703) 306-1636.

The National Science Foundation has TDD (Telephonic Device for the Deaf) capability, which enables individuals with hearing impairment to communicate with the Foundation about NSF programs, employment, or general information. To access NSF TDD dial (703) 306-0090; for FIRS, 1-800-877-8339.

NATIONAL SCIENCE FOUNDATION
ARLINGTON, VA 22230

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE $300

RETURN THIS COVER SHEET TO ROOM P35 IF YOU DO NOT WISH TO RECEIVE THIS MATERIAL ☐ , OR IF CHANGE OF ADDRESS IS NEEDED ☐ INDICATE CHANGE INCLUDING ZIP CODE ON THE LABEL (DO NOT REMOVE LABEL)